DOCUMENT RESUME

ED 132 978 95 IR 004 279

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TITLE	An Overview of a Comprehensive Educational Information System in the State of Kansas.
INSTITUTION	Kansas State Dept. of Education, Topeka.
SPONS AGENCY	National Inst. of Education (DHEW), Washington, D.C.
PUB DATE	Jun 75
CONTRACT	OEG-71-4646
NOTE	75p.; For related document, see IR 004 280
AVAILABLE FROM	Project Communicate, Kansas State Department of Education, 120 East 10th Street, Topeka, Kansas 66612
EDRS PRICE	MF-$0.83 HC-$3.50 Plus Postage.
DESCRIPTORS	*Information Services; *Information Systems; Program Evaluation
IDENTIFIERS	Kansas Department of Education; *Project Communicate

ABSTRACT

Project Communicate began to set up an educational information system to introduce new instructional practices in Kansas public schools. Twelve school districts started the project. A project director, several education specialists, and an information specialist were part of this program. Field agents were sent to instruct educators to use the innovative instructional materials. Brochures were sent to school personnel introducing them to information retrieval systems. During the developmental phase searches averaged 91.4 each month. Requests came from 64 percent of teachers and 41 percent of administrators. Seventy-five percent of the clients evaluated the project. During the transition phase maintaining and expanding services to rural districts was undertaken. Change from federal funds to local and state funding occurred. From the transition phase to the implementation phase the project saw a greater expansion of the information systems to 93 school districts, 14 colleges and universities. Kansas National Educational Association and five adult education centers were also added. Expansion of services, regional workshops, utilization of a statewide information system and assisting school districts are plans for the future. (AP)

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ED132978

An Overview Of
A Comprehensive Educational Information System
In The State of Kansas

Under the Provisions of Federal Legislation
Governing the Continuation Of
A State Information Dissemination Linkage Project
(National Institute of Education)

Kansas/Project Communicate:
A Program for the Development
Of A Comprehensive State
Education Information System
(OEG-71-4646)

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December 1, 1971—March 31, 1975

Report Submitted: June 1, 1975

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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CHAPTER I - DEVELOPMENTAL PHASE

Kansas/Project Communicate: A Summary Of Original Purpose

Project communicate was part of a regional effort to establish a comprehensive educational information system that would support the adoption of innovative instructional practices in Kansas classrooms. The project was to function within a pilot region whose characteristics would be generalizable to comparable districts elsewhere in Kansas, and to other regions comprising the Six Midwestern States Consortium (Missouri, Nebraska, Iowa, North Dakota, South Dakota, and Kansas). The objectives established for Project Communicate embraced the following *operational processes:*

- to establish linkages necessary to promote the adoption of innovative instructional practices;
- to direct the proposed information system to a pilot region within the state of Kansas so that it will (a) provide for the adoption of innovative instructional practices as specified in objective one, (b) be generalizable to other regions in the state of Kansas, and (c) be generalizable to members of the Six Midwestern States Consortium;
- to effect a significant change in the identification of educational needs within pilot region schools;
- to influence attitudes among educators within the pilot region (fourteen school districts) for more widespread adoption of new educational practices.

Stated Limitations in the Original Project Design.

- Emphasis was to be placed upon the development of a demonstration information system rather than on the establishment of a multi-state system or the reconversion of existing state information components to system operations.
- The Kansas State Department of Education would develop the proposed information system for use in fourteen pilot districts, with necessary linkages to local classroom personnel;
- Project Communicate staff would identify and then serve specified *need(s)* areas within the pilot region. Those need areas would be limited to maximize project efficiency and resources.
- Project activities would be directed to a selected audience who would be links to effective change within pilot region districts.
- Project Communicate was to be viewed as *developmental* in nature, and was not to be construed as a research effort. That is, its *objectives were operational* in scope, and sought to provide direction when field implementation began.
- The project was to focus upon instructional information. *Information,* as described in the original proposal, referred to descriptions of successful operating programs and research-based, validated instructional materials and systems, as well as research knowledge and results of evaluation studies.
- The information system developed for Kansas was not to serve as an organizational clearinghouse for statewide dissemination, but was to strive for the establishment of the linkages required to accomplish a diffusion of innovative instructional practices in classrooms.
- All linkages in the Kansas information system were conceived as being tentative (not fully formulated) at the date of original proposal submission.

Addendum to Original Application (#1 BR No. 1-0650)

A major operational element influencing total project emphasis was an addendum to the original proposal application, directing the Kansas State Department of Education (KSDE) to establish an educational information system that responded to the operational elements described in the original application, ***but also*** directing the State Department to establish and maintain the following services:

- to provide field consultant(s) who will solicit and entertain requests for information from administrators, teachers and other personnel involved in the management, planning and operation of schools and classrooms;

- to provide individualized information services, covering a wide range of subject areas, to both pilot region schools and SEA personnel. Dissemination of that information was to be governed by user-need profiles established by project staff. After information was returned from the information processing unit, the assigned field agent was to screen the material and assist the client in its interpretation and utilizations.
- to recommend pertinent information to client and client-groups in the pilot region and to schedule follow-up meetings that would assist them in obtaining desired basic documents, and in arranging for consultative and developmental assistance at the trial or adoption stages;
- to establish and maintain centralized information processing units in the state education agency (SEA). The processing unit would routinely conduct individualized searches of ERIC and CIJE computer tapes for document numbers and abstracts for clients and field agents;
- to establish one operational pilot region with a supporting field consultant during the first twelve months of service, with a second field agent to be added during the last six months of project activity.

Organizational Overview

Project Communicate Staffing Patterns

Project Director — coordinated the full range of information services provided within the pilot region. He supervised total system development within the first eighteen months of project operation. The latter responsibility included the training of project staff and the establishment of linkages to leadership personnel in the fourteen districts comprising the pilot region. The director continued to provide major consultative service to educational agencies serviced by the project, and assumed, complete responsibility for the evaluation of *all project components.*

Education Specialists/Field Agents — were responsible for the following tasks:

- consultation with clients requesting information and servicing all follow-up requests in a systematic manner;
- reporting to director and supporting staff regarding the disposition of information requests within the pilot region;
- maintaining sufficient liaison with clients, through visitation and consultation, to insure the partial or complete adoption of innovative practices;
- preparing requests for information and relaying such requests to the processing center;
- maintaining user-profiles and reporting all summative data to the director and affected leadership personnel in each district;
- assisting in the planning and implementation of professional development (inservice) activities for information system users;
- supporting the service efforts of the director in the pilot region;
- assisting in the preparation of written materials, bulletins, brochures, guidelines and other reports related to the general dissemination functions of the project;
- serving as a resource person to KSDE personnel and other agencies outside the pilot region.

Information Writer — was responsible for the following specified tasks:

- reviewing, analyzing and/or synthesizing information appropriate to the technical needs of the project's processing unit. The writer worked with the referral unit in conducting alternative search strategies, editing abstracts, indexing unsystematized materials, and in the summarization of findings and conclusions from field agents and other referral specialists;
- utilizing current training materials and developing additional materials as required for the conduct of user-education programs;
- abstracting and indexing documents, including research and resource materials, relevant to the needs of Kansas schools following the guidelines established for the ERIC system;
- coordinating and editing the style and format of all project publications;
- writing descriptive reports and other informative papers suitable for general dissemination;
- performing other related tasks as deemed appropriate by the director.

Information Specialist — was responsible for the following specific tasks:

- collecting and organizing educational resource materials within the project and making those materials suitable for retrieval by project staff and clients;
- writing logic for computer searches and screening ERIC abstracts for relevancy to client needs and feed-back to improve logic;
- maintaining the SEA library;
- selecting and ordering materials required for information center operations;
- supervising secretarial and clerical work related to the processing and packaging of user requests for information;

Clerk/Stenographers —were responsible for the following tasks:

- typing letters, formal reports, information requests as required by director and staff;
- filing incoming and outgoing correspondence, as well as microfiche, forms, index cards, pamphlets, and other information center materials;
- maintaining records on micorfiche received by the information center, and producing hard copy from the microfiche reader/printer;
- keypunching computer logic for ERIC searches;
- receiving incoming microfiche, posting data for monthly tabulation, utilizing reader/printer to scan, select and print appropriate pages for clients;
- sorting a large volume of computer printouts of actual ERIC abstracts, checking file information for correctness of order, posting varied information and refiling.

Technical Processing Procedures (Information storage, retrieval and dissemination)

The technical (production) aspects of project activity have evolved into a highly functional service for clients. As might be expected, the initial task of the director was to establish appropriate staff roles and to train qualified people to fill those roles. Most staff were inexperienced in information systems work when first employed; nevertheless, they quickly familiarized themselves with the various hardware and software components of the Kansas system. Figure 2 (page 18) describes the information system that emerged early in project activity. A description of each process step is provided.

Project Communicate has computer access to RIE and CIJE files. It presently utilizes the North Dakota computer search program which searches descriptor listings. That computer package needed little revision in terms of the information system needs identified for Kansas. Initially, the information center had some difficulty getting computer logic punched, since the project did not have access to SEA key punch operators during peak load periods. That problem was remedied by the acquisition of additional hardware, and an official reprioritization of SEA user time which improved the project's service capabilities.

Information Services Currently Available

Many of the early difficulties in providing requested materials have been overcome by the acquisition of additional hardware and software components. For example, project access to its own ERIC collection and the availability of a microfiche reproducer at the information center has improved its turn-around time. Similarly, the ability of project staff to conduct their own computer search of RIE and CIJE has resulted in more efficient searches.

During the month of October, 1973, Project Communicate negotiated, wrote logic for, key punched, searched, printed, screened, highlighted and delivered 305 requests. Table 1 illustrates the volume of requests from September, 1972 through April, 1973.

An equally important measure of information utilization is the follow-up and technical assistance to

clients. Table 2 shows, in quantitive terms, the variety of services provided. Additional supporting data of a "qualitative" nature are reported in the evaluation section of this proposal.

Methods Of Linking

Establishment of a Pilot Service Area

Project Communicate began its operations on December 1, 1971 with the employment of a full-time director. His initial task was to establish a service area (pilot region) that embraced school systems of *various sizes* and *at different levels of information saturation*. Three school districts were identified for each of *four* levels, one district at each level having a comparable number of attendance centers, professional and non-professional staff, and students. One large urban district (Kansas City, Kansas) was added in September, 1972. Table 3 shows the districts comprising each level of information saturation.

Level IV Districts — Each district received total information saturation. The full-time field agent utilized retrieved information in two ways: (1) to provide a viable information base for client decision making; (2) to legitimate the potential for innovation in schools and classrooms through client utilization of improved information resources. The agent actively solicited information requests in these districts, and attempted to isolate those personnel most likely to use acquired information to improve the educational process.

The agent's conceptualized "catalytic" role required his entry into these districts with a formal presentation to faculty at each attendance center. A slide presentation described the project's capacity to retrieve educational information upon request for individual users. The agent also entertained questions from his audiences and distributed descriptive brochures for their perusal.

Level III Districts — The field agent at this level attempted to provide the same services as in Level IV. However, this role is designed as a part-time role or an "added-on" responsibility. In many situations Level III field agent activities were given a lower priority.

Level II Districts — No field agent was assigned to these districts. A project staff member presented the slide/tape show to district personnel and explained the project's objectives. Brochures were also made available to interested staff. After this initial exposure, prospective users could forward any request to the SEA by mail.

Level I Districts — Attendance centers in those districts did not have the services of a field agent or any direct contact with project staff. Their personnel received the brochure which provided basic information about project services.

Urban Component (Kansas City, Kansas) — The field agent serving this school district was housed in the central office, with direct access to curriculum heads and supervisors with system-wide responsibility. After the agent's initial media presentation to those staff, he started receiving numerous requests for information services. To initiate project entry at the building level, formal presentations were made at separate secondary and elementary principals' meetings. With their cooperation and using curriculum directors and supervisory staff as communication linkers, formal presentations were made at selected attendance centers. In addition to building-level presentations, information about project services was disseminated districtwide via inservice meetings, district publications (staff news bulletins), radio interviews, and local newspaper coverage. As staff at all levels became familiar with the project's potential for direct and individualized information services, it was essential in a district of this size to consider the potential of school librarians as the liaison between client and client-groups and the field agent. In fact, the sheer logistics of project operation in Kansas City meant that some limitations had to be placed on individual services. Field agent involvement with "groups" sharing common information needs has provided more productive.

Range of Services Provided to Client and Client-Groups —

The operational design that emerged early in project activity placed two field agents in extension offices at Lawrence and Kansas City, Kansas. The director was housed at the KSDE building at Topeka, Kansas. The field agents continue to provide sustained support to five (5) of the fourteen (14) pilot school districts. The director serves as a part-time field consultant to three (3) districts. Six districts (Levels I-II) request and receive information by mail.

As mentioned earlier, the amount of information service and staff support provided districts varies in accordance with predetermined levels of saturation (i.e., Levels I-IV). In all cases, school personnel have received a descriptive brochure entitled, "There Must Be A Better Way.... To Educate Our Youth." The basic philosophy of the Kansas information retrieval system is described in the brochure. By intent, that communication vehicle did not imply that Kansas school personnel were *behind the times*, nor was it inferred that they were beset by problems that could not be resolved without project assistance. The brochure simply states that useful educational information can be retrieved through use of the project's services. The brochure has been an invaluable tool in establishing direct communication with a broad range of client and client-groups. It can be used as a hand-out at inservice sessions, and as a stamped, self-addressed mailer by individuals requesting additional information.

An initial dissemination hurdle was familiarizing clients with the use of microfiche as a means of reading information. That obstacle has been partially resolved as more affected districts acquire their own microfiche readers. The project has ten readers available on a short-term loan basis. As a rule, the project furnishes users with 2 or 3 pages of hard copy, generally descriptive of the requested item, and attaches a complete microfiche. This approach hopefully encourages the client to find a microfiche reader and then study the entire document. Obviously, the large cost differential between microfiche and hard copy has been a central concern in the project's effort to promote microfiche utilization.

By October, 1972, a print-out of the project's first 500 searches had identified the most popular information requests. With that data, staff generated computer searches in each specialty area. Each topic was screened, cataloged and xeroxed for "on-shelf" distribution. Updating of those documents has been conducted quarterly. October, 1972, also saw the project reach its one thousandth individual request for information services. By that time, staff had the hardware and software capacity to conduct computerized searches of the RIE and CIJE files of ERIC, as well as manual searches of SEA and state library materials. Numerous client requests have been received by director and field agents to provide follow-up support after the receipt of requested materials. In fact, *more* staff time is currently being expended on follow-up activities with clients. That staff utilization pattern is emerging in both the rural and urban components, as well as among users employed by the KSDE.

The first eighteen months of activity also saw the project develop *three* in-house publications directed to educational issues of major statewide interest. Information about *The Extended School Year* manuscript was disseminated via the SEA bi-weekly newsletter. The availability of *Open Education* was reported in the *KSDE News-Notes*, in *Action*, a Kansas NEA publication, in *Et Cetera*, a house organ of the KSDE, and in the *Kansas Teacher*, the periodical of the Kansas State Teachers Association. More than 750 copies of that publication have been mailed to Kansas educators. The third publication, *The Mini-Course: A Promising Technique* was mass mailed to selected educators throughout the state. The positive statewide receptivity to each of these documents has been a source of professional gratification to the entire staff.

Evaluation Of Project Activities
(December 1, 1971 - June 30, 1973)

Basic Evaluation Scheme

Evaluation of Kansas/Project Communicate was to be performed in accordance with the project's developmental and operational functions. ***Developmental evaluation*** would determine when all goal components had truly become functional, and ***operational evaluation*** would be performed to assess the effectiveness of the project's operational (search and retrieval) components.

Developmental Evaluation (A Measure of Project Goal Attainment)

The objectives specified in the initial proposal presentation emphasized the establishment of information linkages that would promote the adoption of innovative instructional practices in Kansas classrooms. A linkage was defined as the interaction between individuals and systems wherein the roles of conveyor, consultant (field agent), trainer, innovator, knowledge builder, practitioner, and user are identified. As an independent variable, a linkage serves as the key factor in the adoption and diffusion of educational innovations.

The purpose of the information system was to create information linkages that would facilitate classroom change. If the linkages established for Kansas/Project Communicate were the right ones, they had to be sequentially ordered from initial client request to the adoption of a new instructional practice. Rogers (1962) model describing the sequential steps in the adoptive process led to the development of the project's own ***Utilization Index*** (developmental evaluation).

It should be noted that the director interpreted the project's function as that of a field-based service unit for Kansas schools. Since many of its information services fell into areas that deal with complex educational and social phenomena, there had to be some acceptance of the fact that any formal evaluation of noncomparable, unrelated information services would, in itself, be of limited value in future program development. A necessary correction factor has to be the establishment of generalized criterion guidelines which could objectively and nontechnically measure the *impact* of a total range of project services on pilot region schools. The indices developed attempted to systematically measure client use of retrieved information, using three discreet variables, and combining those variables to ascertain total project impact on clients and client-groups. The indices view receptivity to change as being controlled by (1) the relative complexity of the idea; (2) the degree of innovativeness displayed by the client or client-group; and, (3) the degree of individual variability in the adoption process.

Complexity

Simplistic — *Very Complex*

I — II — III — IV — V

The continuum shown above suggests that a client's information request can be rather simplistic or, conversely, very complex in organizational and instructional redirections. Variations in complexity are described as follows:

I—Changes in schools or classrooms that do not require major modifications in resource allocations or staff utilization (e.g., adoption of a new text, utilization of supplementary classroom material);

II—Changes in staff function but no changes in resource allocation (e.g., adoption of new curriculum, mini-courses, some individualized aspects of teacher accountability);

III—Changes in resource allocation but not staff function or a major change in attitudes (e.g., computer-assisted instruction, open education);

IV — Adoption of New Methods and Materials (e.g., the adoption of a K-12 career education program, computer math, or behavioral (affective) analysis strategies);

V — Formalized changes in traditional role relationships between the school and outside supporting agencies (e.g., collaboratively-developed career education programs involving local employers).

Project evaluation was conceptualized as calling for a measure of the complexity of information requested by client and client-groups. Data descriptive of that measure are reported (see Section V) in both tabular and chart form. The evaluation data on each district in the pilot region are "pooled" according to their predetermined placement in the four levels of information saturation (I - IV, Urban). Percentiles are used to report a range of complexity (0.5 - 5.5) for each saturation level.

Innovativeness (Client or Client-group)

Innovator	*Early Adopter*	*Early Majority*	*Late Majority*	*Laggard*
I	II	III	IV	V

The innovativeness continuum recognizes that client utilization of educational information turns so much on the institutional and professional press he must respond to. For example, the fashionability of change and innovation can be influenced by environmental circumstances, intellectual awareness, motivational factors, and the career plans of the client. The field agent was thus required to make some independent judgements about client receptivity to innovations. The adopter categories (Rogers, 1962) utilized are described as follows:

Innovator (I) — Willing to accept risks; young and of higher social status; current in the utilization of scholarly material; extensive professional interaction with other innovative types;

Early Adopter (II) — Holds the respect of professional peers and has significant contact with *local* change agents;

Early Majority (III) — Willing to consider adoption after colleagues have embraced the change; has considerable professional contact and influence with *local* change agents and early adopters;

Late Majority (IV) — "Skeptical" and overly concerned about peer resistance to change; professional associates (cronies) tend to be early- and late- majority types; tends to have *limited* opinion leadership in professional deliberations;

Laggards (V) — Tradition-bound and place-bound; professional values are *not* influenced by "innovative" educational practices.

These assessments of innovativeness were obtained by the LAIN scale (Herlig, 1971) and the subjective judgements of KSDE personnel familiar with those districts. The innovation score was rated along a continuum (range 0.5 - 5.5) in the same manner as the variable of complexity in an attempt to measure the degree of innovativeness displayed by a given client and client-group, as well as a pattern of receptivity to innovation that seemed to hold for some districts rather than others.

Adoption

Awareness	*Interest*	*Evaluation*	*Trial*	*Adoptions*
I	II	III	IV	V

The third variable comprising the index scale recognizes that the road from initial exposure to instructional adoption embraces a number of behavioral plateaus. The field agent rated the client's perceived behavior along the adoption continuum illustrated above.

Awareness (I) — Exposure to the innovation but not yet motivated to seek further information; individuals's recognition that the innovative idea may respond to a specific classroom or school need;

Interest (II) — Client becomes interested in the innovation concept and actively solicits additional information; his/her behavior has become purposive;

Evaluation (III) — Client applies the information to his/her present situation (trial stage); reinforcement is needed at this level if the client is to be expected to proceed;

Trial (IV) — The client applies innovative information on a pilot basis to determine its suitability and usefulness in his/her localized situation.

Adoption (V) — Client decides to use the innovation after full evaluation and review.

The degree to which client and client-groups actually used acquired information to facilitate institutional and classroom change represents another dimension of developmental evaluation. The scores for individual users were recorded on the project's standard information request and client evaluation form (see Appendix A) by the assigned project staff member. The possible range of scores was 0.5 - 5.5, and are reported (see Section V) by percentile rank for users in both the urban and Levels I - IV districts.

Utilization Index

It is suggested that all three variables (i.e., complexity, innovativeness, and adoption) can be combined in an attempt to measure the *impact* of the information and technical assistance provided by project staff on the educational practices in the pilot school districts. All three variables multiplied provide a *Utilization Index* (Utilization Index = Complexity x Innovativeness x Adoption) that ranges from 0.5 - 125.5. Section V reports Utilization Index scores for scores for the Levels I - IV and urban pilot districts. Again, the performance of district users at the various predetermined levels of information saturation is shown by percentile rankings. This Utilization Index should be viewed as a variable measure of information utilization by pilot district personnel.

Operational Evaluation (A Measure of Service Effectiveness)

Evaluation of project services included the collection of data describing the type and frequency of information system inputs and outputs. Emphasis was placed on *demonstrated effectiveness* rather than on a chronological review of project growth. The director conceived the task of Kansas/Project Communicate as directly supporting change in local classrooms. Accordingly, the hard data reported under Operational Evaluation reflect project success in serving immediate users in the pilot region and the KSDE. The extent to which the project efficiently serviced its clients also lends itself to a subjective evaluation of past role performance by both the director and his supporting staff. Those reflections constitute a generalized reaction to the first eighteen months of project activity.

Some of the same data were subjected to a more sophisticated statistical analysis. This report (Herlig, 1973) is available from the Kansas State Department of Education.

Analysis Of Evaluation Data And Findings

This section contains data descriptive of the pilot region and clients serviced by Kansas/Project Communicate. It includes (1) an analysis of data related to the attainment of project goals; (2) an analysis of data reporting the frequency and type of service outputs to client and client-groups; (3) a report of client rankings of project services; (4) the subjective reactions of Director and staff to the first eighteen months of operational activity.

Developmental Evaluation Data

Information Utilization Index — As described in Section IV, the utilization index is an attempt to measure the impact of acquired information on the pilot district. The utilization formula combines the variables of complexity, innovativeness and adoption in multiplicative fashion to give the evaluator an estimate of client and/or district utilization. **Table 4 (page 22)** shows districts serviced by field agents (Levels IV, III and Urban) having the highest U.I. rankings.

Figure 4 **(page 23)** shows, in more striking terms, the impact of field-agent intervention (Levels IV, III, and Urban) on the district's potential for full utilization of acquired information.

Operational Evaluation Data

Project Communicate Services to Kansas Clients — The best introduction to the full range of activities provided by the project is to examine the statistical report of information services described in Table 5 (page 24).

The staff views this data as supportive of the efficiency of project services to clients inside and outside the pilot region. Search production averaged 91.4 each month throughout the developmental phase (first eighteen months) of project activity. That figure grew to 108.6 per month during the 1972-73 school year. The field agents quickly found that the generation of client business presented no special problem. Indeed, the problem was trying to limit the number of information requests to manageable size.

The balance between information requests from administrator and teacher clients was proportionately in balance. The project had 1,055 teacher requests (64 per cent) and 232 administrator requests (14 per cent). The director and field agents worked extensively with both professional groups. More than 100,000 abstracts of RIE and CIJE documents were produced for all clients during the developmental phase of project activity.

Client and Client-Group Evaluation of Project Services — Formal evaluations of project services were obtained from 75 per cent of requesting clients between January, 1972 and May, 1973. The project utilized a standardized information request and client evaluation form (Appendix A) that was returned by mail or completed on-site in the presence of a staff member. The evaluation form asked respondents to rate the information received for its quality, stating how they or their staff used the information, and make any additional open-ended comments as necessary on the form.

Table 6 shows, by level of saturation (I - IV, Urban), the percentage of possible clients to the actual clients and the percentage of searches conducted to actual evaluations received from users.

More than 1,200 personal interviews were conducted in the evaluation of the project's search and retrieval services. Across all saturation levels the project had a high percentage (89.80) of its searches evaluated. Although not reported, the KSDE staff requested 178 searches, the majority for outside clients in the western part of the state. A total of 57.4 per cent of those searches were evaluated. It should be noted that Level II districts were scheduled to have more direct project support than those receiving Level I services. The operational reality, however, was a significant difference in interest, enthusiasm and utilization between Level I and Level II districts.

Table 7, (page 26) reports subjective evaluation data emanating from the client request and evaluation form and in-house "tally" sheets. There was little gross difference in client evaluation as dependent upon assignment to the four levels of saturation, to an urban/rural location, or to a given client category. Clients generally rated the information received as: Excellent (20 per cent); Very good (40 per cent); Fair (10 per cent); and, Poor (10 per cent).

The comments section of the evaluation form elicited reactions ranging from: "A very effective method of gathering relevant data," to a disgruntled building principal irked for having to "pay" for information services by completing the evaluation form. As Table 7 shows, the highest percentage of clients applied requested information to classroom activities, to their personal professional development, and to facilitate curriculum revision. Less extensive use was made of information in other categories. More use was made of information in the Level IV and III districts, a circumstance attributable, in part, to the accessibility of project field-agents.

As noted earlier in this report, some clients had a negative fixation with microfiche material. Others lacked the equipment (readers) essential for its use, and had to creatively improvise in order to read the material. Clients occasionally used acquired material in preparation for formal presentations at

professional meetings or to develop proposals for federal funding. Others suggested the information's value in helping them evaluate the worth of a proposed program. That is, they may have found it expeditious not to adopt a particular new reading or math program. On several occasions, acquired information was actually borrowed by parties unknown and never returned.

The pattern of use across all four saturation levels suggested a positive "ripple effect." Information was shared by the original clients with numerous others (2,053) as shown in Table 7 (page 26).

The actual time of information utilization varied as determined by saturation level and availability of project staff. The staff observed that some clients either did not know how to use the material or were simply unwilling to exercise even minimal initiatives in pursuit of additional options. It would seem, therefore, to be a matter of personal motivation, coupled with a staff capability for persuading clients

Subjective Evaluation of Services by Project Director and Staff

Kansas/Project Communicate has attempted to evaluate its goal attainment over the first eighteen months of project activity in as objective a manner as possible. Its staff appreciated the need for that type of evaluation. Nevertheless, the management of any innovative project provides each staff person with a variety of new experiences, the recitation of which can add much to a total evaluation profile. Those perceptions are reported below by job classification.

Project Director — Project Communicate mandated the creation of a whole new division in an educational service organization with no previous experience in information systems work. The project manager literally started from scratch in the employment and training of supporting staff, and in the acquisition of essential hardware and software components. It was an intense and highly personal learning experience in the absence of assistance from KSDE personnel with expertise in the development and utilization of information systems.

The original proposal, as written, was a totally unrealistic document in terms of its "process" and "product" goals. Most of the original goal statements could not be achieved in Kansas in twenty years let alone eighteen months. As a result, the initial conceptualization of project services had to be totally redirected if it was to become a "client-centered" change model.

Many advantages accrued by having the director functioning as a *full-time* employee. The willingness of KSDE leadership personnel to lend official status to that position made the management task that much simpler. Accountability for project goal attainment was owed to a ranking assistant commissioner, rather than to a section head in a research division.

Field agent responsibilities were so numerous in pilot region districts that their effectiveness with clients was undoubtedly compromised. Lower utilization index rankings, in some cases, were attributable to staff being spread too thin.

As an innovative effort, the project's range of services and its potential as a facilitator of classroom change had to be sold to prospective clients. The more innovative professionals "brought in" early with the skeptics coming along later. It should be noted that there is a definite hierarchy of information needs among teacher clients. Initially, curricular materials were in greatest demand, with long term program redirections being requested at a later date. When clients became familiar with the technology of search and retrieval, they began to serve very adequately as change agents in their own districts.

It is essential in the development of a new information systems program that staff consider the temporary use of retrieval services from another agency. The plethora of other start-up concerns does not permit sufficient time to focus on your own computer operation. That development can come later when it is beneficial to have complete control over your own logic writing and searches.

Urban Field Agents — Deal with district middle-management personnel with tact. The agent must be non-threatening and let his supporting relationship emerge naturally as middle-management personnel discover the value of available information services. Services to clients functioning at the building level should be "phased" so that intensive personal assistance can be initially provided in a number of attendance centers, with an eventual limiting of that service to an in-depth focus on client-groups in a reduced number of schools. There is a tendency to initially over-sell project services to the extent that clients order materials they never use. Educators are great collectors of new cognitive inputs, and are equally infamous for their limited utilization of same.

— In general, it would be appropriate to follow up on an initial search request before letting the client request another. This operational practice will discourage patterns of random ordering and limited utilization.

— The field agent's clerical chores, unless controlled, can effectively limit his facilitator role. Its the old "red tape" syndrome.

— I was generally impressed with the project's evaluation scheme. In the urban context, there was an obvious relationship between the findings of the *objectively-determined* and *subjectively-determined* data.

— I enjoyed my change agent role.

Rural Field Agent — Some random thoughts:

- working as a generalist seems to be more effective than working as a specialist;
- the field agent has limited time to search out materials and clients. The information center must support him in that effort;
- the field agent is more effective working on a full-time basis;
- secretarial help is a must;
- daily logs must be kept of field agent activity;
- the field agent should recommend outside consultants to clients for specialized implementation beyond his skills;
- the field agent should be available approximately every two or three weeks to insure sustained client service;
- good in-house materials should be kept on hand for fast service when necessary;
- the field agent should approach clients in a non-threatening fashion and practice good human relations at all times;
- the field agent should be specific in writing up requests so that the logic writer may tap all possible sources relevant to requested information;
- the field agent should know what information is available in the client's immediate locale;
- the "eight" cent stamp is not a forceful change agent;
- confidentiality concerning client requests can be important;
- genuine respect for clients and what they are attempting to do is a basic requirement for the field agent;
- the field agent cannot be a "one-stop" information service: The client may be given leads toward finding information, but should recognize the need for personal resourcefulness;
- the field agent should screen all materials going to clients in order to be prepared for implementation activities;
- it's hard work, but it's fun.

Part-Time Field Agent — Some random thoughts:

- The director served as a part-time field agent. He needed no special training for that role, although a less experienced individual might have.

- The press of other duties tended to minimize his agent role. This role often received the lower priority;
- There was a problem trying to follow through on many client requests. In many instances, delivering a print-out was the best one could do in the short time allocated;
- There was no problem getting entry at the building level. Clients were friendly and quite interested in almost all cases;
- I would suggest the need for a low "ego-profile" for the field agent. Let the client take credit for any ideas and new learnings that accrue.

Information Writer — The anticipated role - summarizing computerized information collected from each search - proved unrealistic from the outset. What proved more feasible was in-house research and publication production emphasizing promising educational programs and practices in Kansas schools.

Two factors influenced the evolution of the information writer's role: a. Being developmental by nature, the project required decisions by the director which altered the writer's initial job description. Those duties also delayed the screening of copy as it developed. b. The first factor was somewhat influenced by the second; that is, the lack of writer's background in education necessitated more screening and close supervision during the first months of project activity.

Assisting the information specialist was a means of drawing the writer into the mainstream of project activity. Those tasks included: a. Assisting in manual searching of non-computerized resources; b. Screening computer searches which were developed into PACS (Pre-Assembled Computer Searches). The writer's original role description - i.e., researching and formal writing - was actually outside the mainstream of project activity. It was a mater of some pride, therefore, when the writer's publications were enthusiastically received by clients. Those publications included *The Mini-Course: A Promising Technique, The Extended School Year,* and *Open Education.*

The job became more functional as "start-up" problems were resolved. Work is now progressing on a fourth in-house publication, *Independent Study.* Computer abstracts, bibliographies from education journals, as well as other fugitive materials, are now accumulated. A proposed project newsletter is already off the drawing boards and will be ready for dissemination in the Fall of 1973. The meaningful integration of the information writer into project activity has been attained after a period of initial role ambiguity.

Information Specialist — An ERIC retrieval specialist benefits by some prior exposure to the field of education. While a formal education in the field may not be essential, familiarity with education terminology is helpful. Some knowledge of library skills is also beneficial in terms of the organization of materials and reference tools.

ERIC should be considered a major resource in the information center. However, since certain areas of weakness do exist within its literature base, additional resources should be added to supplement the ERIC file. Major newspapers (e.g., New York Times, etc.) may be an important asset since terms relating to national education programs may not appear in any other form.

Screening of abstracts is an essential function of the information specialist. It must be a thorough screening for it serves a three-fold purpose: (1) it determines if further work needs to be done on a given search before the abstracts are sent out to clients; (2) it permits the specialist to test his logic and to pick up ideas for improvement in logic writing; (3) it enables the specialist to identify areas of strength and weakness within the ERIC collection.

The center should retain as many in-house journals as budget limitations permit in order to provide a wider availability of articles with the fastest possible turn-around time. The journal articles are important to the dissemination center since they are extremely popular.

Computer access is a must for any effective ERIC center. Without the computer, the number of requests processed per month will be severely limited. Manual searching is simply too time consuming.

Vertical files or other methods of material organization should be established to control all fugitive non-ERIC material. Clearinghouse publications and newsletters should also be handled in this manner.

Open channels of communication should be maintained between the retrieval specialist and any existing field-agents or local linkers. If good working relationships and clear communication exist between these individuals, ambiguity relating to specific information requests can be clarified with better service for clients.

The information specialist, along with other staff, should do whatever is possible to encourage submission of materials to the ERIC data base. The specialist in particular is in a position to know when a weakness exists in the ERIC File.

One major problem is the time factor and its impact on the *quality* of the project's work product. With limited staff and few resources, *quantity* takes precedence. Ideally, each client request should receive sufficient time to tap all available in-house and local resources related to the request. For each client to receive full consideration, the staff work load has to be manageable. If the information specialist is unrealistically overburdened, sacrifices will have to be made to quality.

Summary, Conclusions And Recommendations

Brief Summary of Project Goals and Activities

Kansas/Project Communicate is an information linkage project operating within the Kansas State Department of Education. Its purpose is to develop a client-centered information system in order to expand the linkages necessary for the adoption of innovative instructional practices in Kansas classrooms, as well as increase the general use of pertinent educational information in teacher and administrator decision making. The pilot region receiving information system services comprised twelve school districts clustered into *four* levels of information saturation. Clients in three additional units received either full or partial service. They were the Kansas City, Public Schools, the Baldwin City, Public Schools, and the Kansas State Department of Education. Project objectives spoke to the following "process" steps during its *developmental phase* (i.e., first eighteen months of activity).

Objective No. 1: To establish instructional linkages necessary to promote the adoption of innovative instructional practices. The project provided individualized information services, covering a wide range of subject areas, to both pilot region schools and SEA personnel. Dissemination of that information was governed by user-need profiles established by staff. After information was returned from the information processing center, the assigned field agent screened the material and assisted the client in its interpretation and utilization.

Objective No. 2: To direct the proposed information system to a pilot region within the state of Kansas so that it will (a) provide for the adoption of innovative instructional practices as specified in object one, (b) be generalizable to other regions in the state of Kansas, and (c) be generalizable to members of the Six Midwestern States Consortium. Project staff recommended pertinent information to client and client-groups in the pilot region, and scheduled follow-up meetings that would assist them in both obtaining desired basic documents and arranging for consultative and developmental assistance at the trial or adoption stage.

Objective No. 3: To effect a significant change in the identification of educational needs within pilot region schools. The project established one operational pilot region with a supporting field agent during the first twelve months of activity. A second field agent was added during the last six months of operation. The field agents solicited and entertained information requests from adminis-

trators, teachers and other personnel involved in the management, planning and operation of schools and classrooms.

Objective No. 4: To influence attitudes among educators within the pilot region for more widespread adoption of new educational practices. The project established and maintained a centralized information processing unit in the state education agency (SEA). The processing unit routinely conducted individualized searches of ERIC and CIJE computer tapes for document numbers and abstracts for clients and field agents.

Conclusions

Objective No. 1 — Evaluation data descriptive of the developmental phase of project activity suggest appreciable progress in the identification and training of local linkers who can promote the adoption of innovative instructional practices. The extent to which those positive new behaviors have been displayed is governed, in many instances, by the level of field agent support made available to interested client and client-groups. The findings (developmental evaluation) show the continuing task to be a matter of getting clients to *utilize* acquired information in as complete a manner as possible. In general, field agent intervention has proved to be the critical variable in that regard as shown by the total profile of developmental evaluation data. Without the agent's sustained support, client and client-groups usually did not go as far as they might have with acquired information resources.

Objective No. 2 — The findings suggest that project services to pilot region schools were, in general, positively evaluated by users at all four levels of information saturation. Client rankings of the quality of information materials received has been extremely encouraging to project staff. That feeling is reinforced by the volume of output at the project's processing center (Table 5). There has been a sustained demand for the project's search and retrieval services, as well as direct requests for additional support from field agent personnel. The attraction of users has never been a problem for Kansas/Project Communicate. More important than quantity, however, is the quality of services provided. The central learning for director and staff after eighteen months of development activity is the need to maintain a close follow-up relationship with clients. The latter's acquisition of the skills necessary to obtain information is a key first step. More important over the long term, however, is insuring that retrieved material will be utilized as a resource in support of necessary classroom and institutional change. The staff saw numerous gains in that regard, but appreciates the need to focus its future activities on school personnel offering the greatest potential as local information linkers.

Objective No. 3 — Field agent performance was very satisfactory when analyzed in terms of any available objective or subjective measure. If director and staff could identify some misgiving of general concern, it would undoubtedly be the variable of time. Monitoring client activities proved especially difficult in terms of the sheer volume of individual searches requested. Staff appreciated the need to support clients as they used retrieved information. In many instances, however, the time required for a meaningful dialogue with individual users was never available in sufficient amounts. Those districts with the highest levels of information saturation, including field agent support, generally attained more acceptable levels of information utilization. But even in those cases, field agents and supporting information center staff were generally hard pressed to meet even basic information needs.

Objective No. 4 — The search and retrieval capacity of the processing unit reached satisfactory levels of performance after an extended period of trial and error. The developmental phase saw the eventual acquisition components that now make the processing unit a totally functional entity. At the present time, the project can justify a claim of reasonable self-sufficiency in terms of both staff competency and adequate hardware and software resources. Attaining that operational level has not

been a simple task as this report suggests. A lingering concern will be the retention of staff who can process client requests with quality information and a minimal turn-around time.

Recommendations of Project Director and Staff

The initial proposal presentation should only be viewed as a statement of intentions and must avoid an elaboration of "process" procedures which are not an operational fit for the geographic region to be served. This imploration reflects the circumstances of a director and staff who were not part of the original proposal development team. Many of the plans and expectations detailed in that document proved impossible to implement in any form.

The director of a statewide information systems linkage project will be more productive functioning in a full-time capacity. That employment configuration is extremely critical in a statewide developmental effort. A half-time employee would have difficulty monitoring the full range of start-up activities critical to primary goal attainment.

The role of the field agent is critical to the success of any information systems linkage program. Most client and client-groups can be expected to lack the skills and understandings essential to information acquisition. Obstacles encountered by clients should be quickly corrected through sustained field-agent contact. The experience of Kansas/Project Communicate suggests the strong likelihood of an unreasonable work load developing for field agent personnel. That is, the number of clients can grow to a point that the agent cannot efficiently monitor the effective utilization of retrieved information.

The project evaluation scheme must monitor both the developmental and operational phases of information system activity. Innovative programs are in no position to displace primary goals. That is, any evaluation design should make the critical distinction between project "efficiency" and "effectiveness". The primary goal activity of Kansas/Project Communicate was the development of a client-centered information system whose full development would support the utilization of pertinent information by educational practitioners and decision makers. That goal served as a "true" measure of project effectiveness. Additionally, the efficiency of project operations (i.e., means activities) can be regularly evaluated, in quantitive terms, via monthly or quarterly management reports.The principal project concern, however, is insuring that its developmental goals (i.e., ends activities) are never side-tracked by short-term operational successes.

INFORMATION CENTER ORGANIZATIONAL CHART

Figure 1.

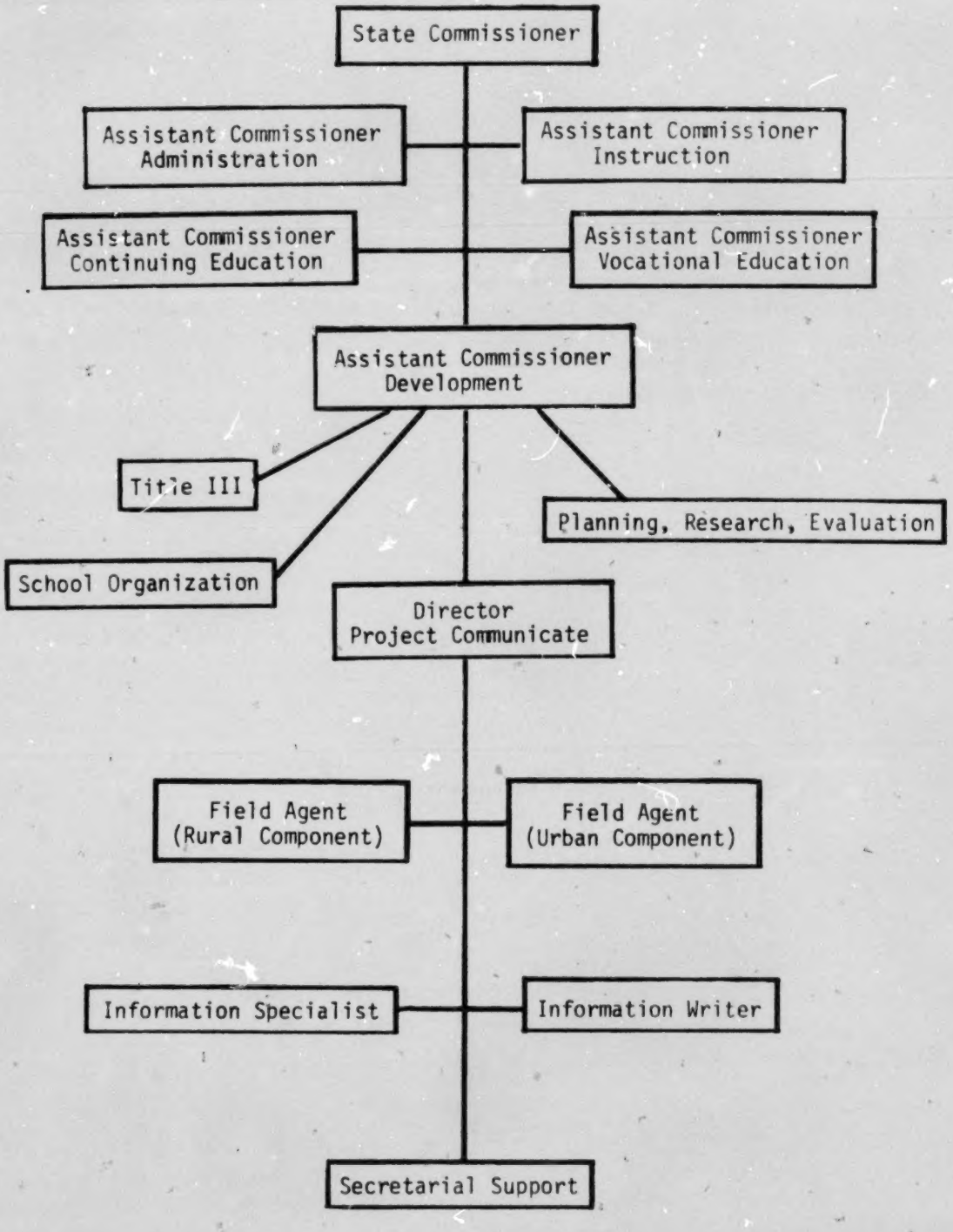

Figure 2

INFORMATION SYSTEM FLOW CHART
KANSAS/PROJECT COMMUNICATE

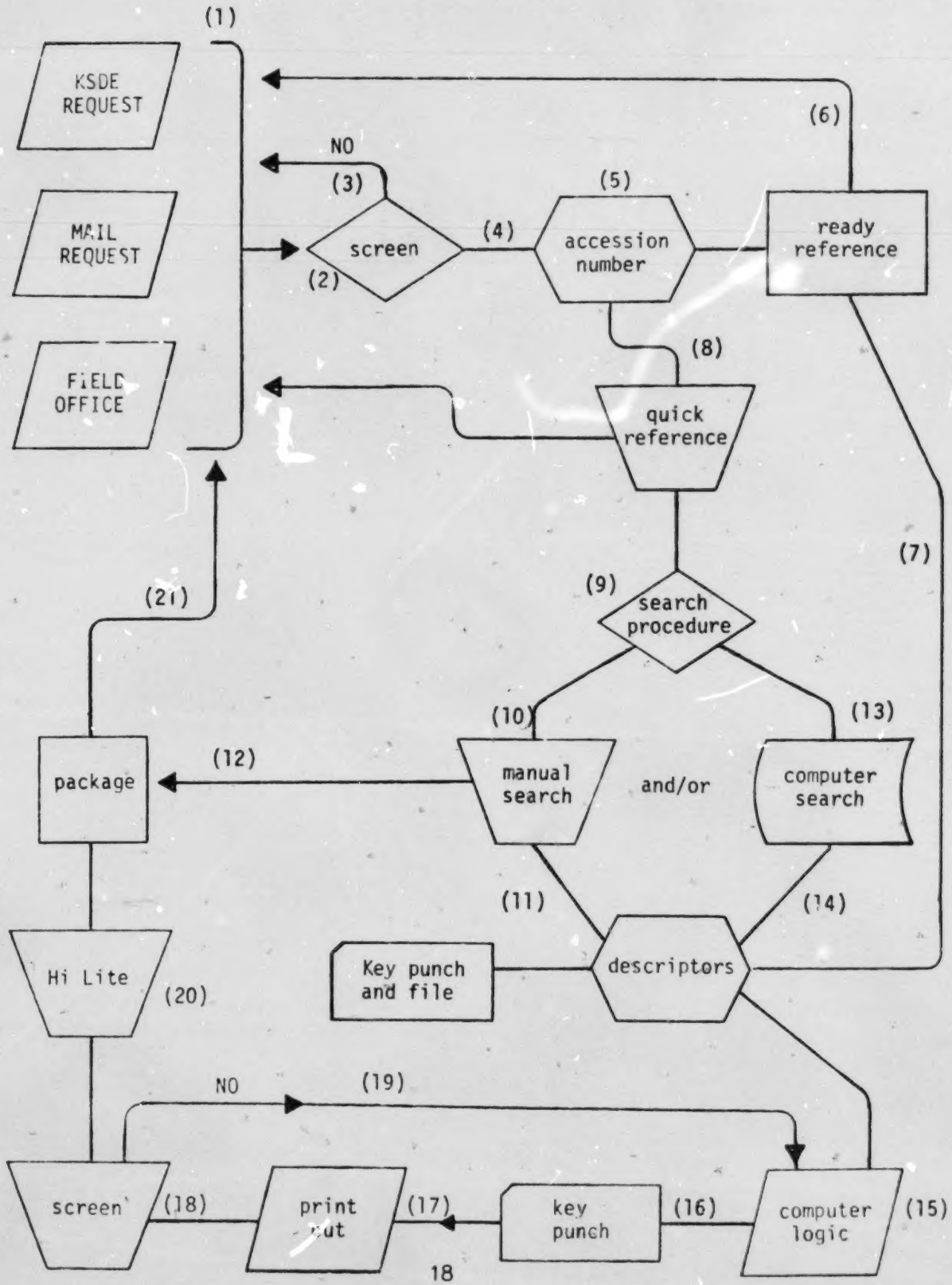

Figure 3.

INFORMATION SYSTEM "PROCESS" PROCEDURES
KANSAS/PROJECT COMMUNICATE

(1) Requests originate from KSDE staff, from Level I or Level II Schools by mail (Form 50-06-101), or from field agent (Form 50-06-100) Appendix B.

(2) Project director screens request.

(3) If an ambiguity or other discrepancy exists, the client is contacted.

(4) Information is typed on form 50-06-100 (field office sends form 50-06-100 completed) 4-part NCR.

(5) 720000 series number is stamped on form 50-06-100, Log Sheet, working envelope and 3 x 5 card.

(6) If possible the request is filled by Ready Reference.

(7) Descriptors - key punch - file - IBM card and form 50-06-100.

(8) Quick reference - an interest retaining technique for searches that cannot be filled by Ready Reference.

(9) Search procedure is determined.

(10) Manual Search - CIJE - Ed. Index - in-house material - special material.

(11) Descriptors - key punch - file - IBM card and form 50-06-100.

(12) Material is packaged and sent to client or field office.

(13) Computer search.

(14) Descriptors - key punch - file IBM card and form 50-06-100.

(15) Search logic is written.

(16) Key punch logic.

(17) Print-out from computer.

(18) Print-out is screened.

(19) If no -- rewrite logic.

(20) Hi-lite abstracts to help client and to give feedback to logic writer.

(21) Print-out is packaged with order form (50-06-102) and returned to client. Form 50-06-100 is enclosed with field office package.

Table 1.

INFORMATION REQUESTS
BY MONTH AND CLIENT CATEGORY
SEPTEMBER 1972 - APRIL 1973
KANSAS/PROJECT COMMUNICATE

Client Category	Sept.	Oct	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Total
Teachers	90	209	66	56	66	54	53	14	608
Administrators	24	59	23	14	31	13	15	3	182
SEA Staff	20	10	10	6	12	7	10	4	79
Other	3	15	14	4	12	15	8	6	77
Totals	137	293	113	80	121	89	86	27	946

Table 2.

FOLLOW-UP ACTIVITIES
BY MONTH AND SERVICE PROVIDED
SEPTEMBER 1972 - APRIL 1973
KANSAS/PROJECT COMMUNICATE

Project Service	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Total
Searches Delivered	142	197	195	121	80	109	182	51	1077
Documents Delivered	185	423	249	182	483	135	346	595	2598
Articles Supplied	0	73	40	80	71	20	118	207	609
Other Technical Assistance	27	52	257	42	103	450	70	6	1007
Significant Contacts	16	24	18	8	15	11	5	3	100
Totals	370	769	759	433	752	725	721	862	5391

Table 3.

LEVELS I - IV (PILOT REGION)
REPORTED BY
DISTRICT DESIGNATION AND LOCATION
KANSAS/PROJECT COMMUNICATE

Category		Student Enrollment Elem.	Sec.	Staff
Level I				
USD #422	Greensburg	177	287	43
USD #254	Barber County	670	363	75
USD #407	Russell	887	1,124	144
Level II				
USD #338	Valley Falls	391	173	41
USD #469	Lansing	735	369	58
USD #207	Ft. Leavenworth	2,277	387	128
Level III				
USD #372	Silver Lake	399	167	35
USD #321	St. Mary's	870	351	74
USD #450	Tecumseh	1,439	1,195	142
Level IV				
USD #342	McLouth	372	169	37
USD #464	Tonganoxie	827	432	66
USD #204	Bonner Springs	1,268	1,149	122
Additional Units				
USD #500	Kansas City	17,402	15,381	1,309
USD #348	Baldwin City	669	287	57

Table 4

INFORMATION UTILIZATION INDEX SCORES. POSSIBLE RANGE 0.50 - 125.50
KANSAS/PROJECT COMMUNICATE
DECEMBER 1, 1971 - JUNE 30, 1973

Client or Client-Group	N	Percentiles 10	25	50	75	90
Level I	155	.93	3.55	4.31	15.75	28.32
Level II	53	2.80	3.58	7.44	15.32	23.42
Level III	249	4.34	8.44	15.33	24.01	40.03
Level IV	343	5.54	7.52	14.37	33.75	38.23
Urban	272	4.03	8.89	14.50	23.02	38.55

Figure 4
PERCENTILE RANKS
FOR THE UTILIZATION INDEX
KANSAS/PROJECT COMMUNICATE

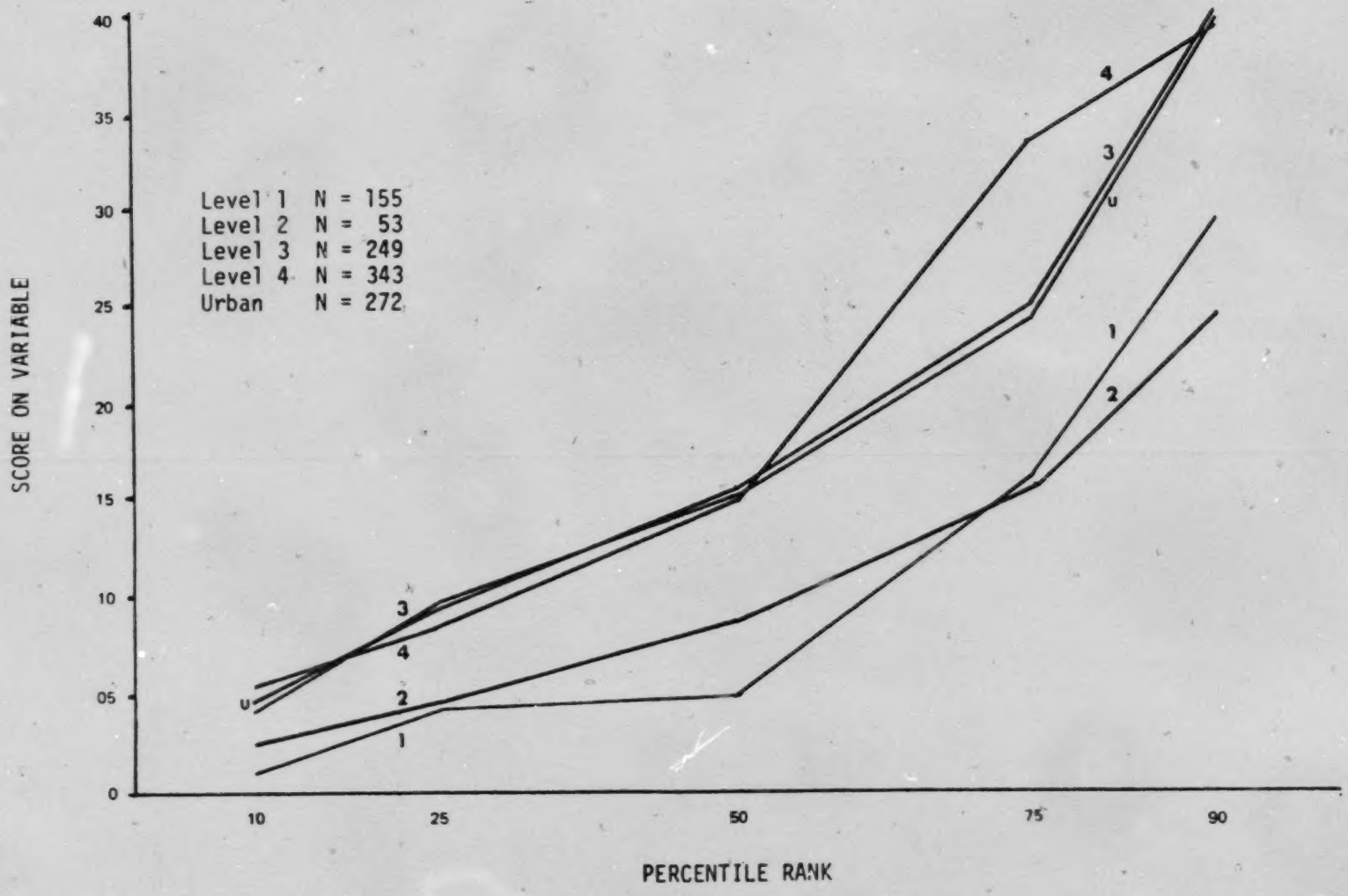

Table 5
STATISTICAL REPORT ON INFORMATION SERVICES
KANSAS/PROJECT COMMUNICATE
DECEMBER 1, 1971 - JUNE 30, 1973

Searches	To Date: Complete	June '73: Complete	Total
Teacher	1,054	1	1,055
Administrator	232	0	232
Board Member	1	0	1
KSDE	186	5	191
Patron	1	0	1
Student	3	0	3
Paraprofessional	0	0	0
Non-Certified	2	0	2
Counselor	33	0	33
Other	114	13	127
TOTALS	1,626	19	1,645
*Computer Searches (RIE)	1,253	23	1,276
*Computer Searches (CIJE)	1,031	23	1,054
Abstracts Printed (RIE)	54,125	908	76,673
Abstracts Printed (CIJE)	20,639	447	23,086
Microfiche titles supplied	5,705	191	5,896
Microfiche reproduced	11,852	384	12,236
Average document pages			109
Hard copy pages supplied	4,793	32	4,825
Journal articles supplied	906	453	1,359
Additional information	981		981
PREPS	700	10	710
Extended School Year	332	11	343
Open Education	843	58	901
The Mini-Course: A Promising Technique	1,961	27	1,988

*Project Communicate search program installed 1 July 72.

Table 6

CLIENT SEARCHES PROVIDED AND EVALUATIONS RECEIVED
(REPORTED IN PERCENTAGES)
KANSAS/PROJECT COMMUNICATE
DECEMBER, 1971 - MAY, 1973

Client or Client-Group	Searches Provided	Possible Clients	Actual Clients	% of Possible to Actual Clients	Evaluations Received	% of Evaluations Received to Searches Provided
Level I	161	202	69	22.50	155	96.30
Level II	63	227	36	18.43	54	85.70
Level III	262	251	134	51.43	249	95.00
Level IV	406	225	146	66.70	343	84.50
Urban	311	1,309	181	13.80	272	87.50
TOTALS	1,203	2,214	566	52.20	1,073	89.80

Table 7

CLIENT RANKING OF PROJECT INFORMATION SERVICES
KANSAS/PROJECT COMMUNICATE
DECEMBER 1, 1971 - JUNE 30, 1973

Item 1. (Information Adequacy)	% Excellent	% Good	% Fair	% Poor
Level I	22.4	37.1	23.8	10.5
Level II	21.6	37.3	31.4	7.8
Level III	22.4	38.2	18.0	8.0
Level IV	21.6	35.1	28.2	4.1
Additional Units				
Baldwin City	19.4	14.9	25.4	10.4
Kansas City, KS.	26.3	32.2	24.4	5.5
KSDE	11.6	33.0	33.0	9.1

Item 2. (Information Use By Individuals)	For Classroom Units	For Curriculum Revision	For Adm. Decision Making	For Professional Growth	Other
Level I	75	77	27	39	7
Level II	20	13	7	32	5
Level III	105	101	40	88	16
Level IV	159	98	40	153	13
Additional Units					
Baldwin City	14	19	14	30	5
Kansas City, KS.	130	86	73	126	50
KSDE	11	17	49	9	31
TOTAL(s)	514	411	250	477	127

Item 3. (Time Of Use)	Already Used	In Near Future	In Three Months	Will Not Use
Level I	64	33	2	18
Level II	27	12	0	7
Level III	144	52	20	24
Level IV	197	74	16	31
Additional Units				
Baldwin City	26	15	3	15
Kansas City, KS.	162	108	14	33
KSDE	61	9	8	15
TOTAL(s)	681	303	63	143

CHAPTER II – THE TRANSITION PHASE

Objectives And Stated Limitations

Funds made available to Project Communicate under National Institute of Education protocols continued programmatic activity into a transitional phase (FY 74) prior to a full conversion to state and local resources on July 1, 1974. The application submitted by the Kansas State Department of Education reflected two basic project redirections: (1) the utilization of local linkers rather than the extension agents that had functioned during the developmental phase; (2) the development and dissemination of printed catalogs of curriculum guides which would eliminate the need for approximately fifty percent of the computer searches that had normally been requested in the past.

Transitional Phase Objectives: FY 74

- ***To maintain existing services in pilot region schools to the fullest extent possible.*** Emphasis shifted to the *identification* and *training* of local linkers in Level I and II districts. Extension agent activities which included question negotiation and processing of information requests in Level III and IV districts were discontinued, with the project director and a training specialist assuming primary responsibility for the identification and training of the local linkers.
- ***To support the development and utilization of educational information systems in Kansas urban school districts.*** The capacity for information search and retrieval already existed in those districts. The task was to identify and train linkers who could take advantage of project resources, as well as the ERIC collections at university libraries in their immediate locales. Training was offered to district personnel with the greatest potential for establishing successful linkages.
- ***To expand existing information services beyond the original pilot region to new rural districts through the distribution of a "package of information services."*** The intent of the information package was to demonstrate the potential of an information system and provide access to computer searches and documents from RIE and CIJE.
- ***To selectively disseminate information about the full range of project services via a monthly newsletter.*** That vehicle provided: (1) information about ERIC and other project resources; (2) revised and up-dated educational information of interest to educators already functioning as linkers; (3) reports on project inservice sessions completed or proposed; (4) reports on classroom innovations currently underway in Kansas schools.
- ***To train selected KSDE staff for the full utilization of information system services, and to function as information linkers within their respective operational divisions.*** Personnel serving in various divisions (e.g., curriculum services, planning, research and evaluation, vocational education, guidance and others would be trained to assume complete responsibility for information search and retrieval, including the writing of logic).
- ***To submit to the national ERIC collection information descriptive of school and classroom innovation in Kansas schools.*** Inclusion of these inputs recognized that individual activities which are significant contributions to educational research and instructional innovation should be disseminated for the benefit of all Kansas school personnel, as well as members of the Six Midwestern States Consortium.
- ***To fully operationalize all procedures necessary for the financial conversion of project activities from federal to state revenue sources.*** That conversion process recognized that the KSDE would be accepting responsibility for the maintenance and further refinement of the existing information center.

Organizational Overview

Project Communicate Staffing Patterns

The FY 74 project staff was composed of the project director, a training specialist, an information specialist, information writer and secretarial support. Extension agent activity in client school districts was officially discontinued. Responsibility for the on-site training of local linkers became the primary task of the Project director and the training specialist. The director had the continuing services of an experienced training specialist, information writer and clerk-typist. The training specialist shared responsibility with the director for the conduct of information system workshops for rural and urban school personnel.

Project Director — The director coordinated the full range of information provided to client districts, and supervised total information system development within the SEA during the entire thirty months of project operation. The latter responsibility included the initial training of project staff and the establishment of linkages to leadership personnel in the original pilot districts and the new service areas. The director also provided major consultative service to all educational agencies serviced by Project Communicate, and assumed responsibility for process and product evaluation in all operational areas.

Training Specialist — The training specialist was responsible for the following tasks:

- conducting information system workshops for both rural and urban school personnel;
- consultation with clients requesting information, and servicing all follow-up requests in a systematic manner;
- reporting to the director and supporting staff regarding the disposition of information requests within the affected service area;
- maintaining sufficient liaison with local linkers through visitation and consultation to insure the partial or complete adoption of innovative practices;
- assisting in the planning and implementation of professional development (inservice) activities for information system users;
- supporting the inservice efforts of the director;
- assisting in the preparation of instructional materials, bulletins, brochures, guidelines and other reports related to the general dissemination functions of the project;
- serving as a resource person to SEA personnel and other agencies outside the original pilot region.

Information Writer — The information writer was responsible for the following specified tasks:

- reviewing, analyzing and synthesizing information appropriate to the technical needs of the project's processing unit. The writer worked with the referral unit in indexing unsystematized materials, and in the summarization of findings and conclusions from the director, training specialist and other referral specialists;
- utilizing current training materials and developing additional materials as required for the conduct of user-education programs;
- abstracting and indexing documents, including research and resource materials, relevant to the needs of Kansas schools following the guidelines established for the ERIC system;
- coordinating and editing the style and format of the monthly project newsletter and other project publications;
- writing descriptive reports and other informative papers suitable for general dissemination;
- performing other related tasks as deemed appropriate by the director.

Information Specialist — The information specialist was responsible for the following specific tasks:

- collecting and organizing educational resource materials within the project and making those materials suitable for retrieval by project staff and clients;
- writing logic for computer searches and screening ERIC abstracts for relevancy to client needs and feed-back to improve logic;
- maintaining the SEA professional library;
- selecting and ordering materials required for information center operations;
- supervising secretarial and clerical work related to the processing and packaging of user requests for information.

Clerk-Stenographer — The clerk-stenographer was responsible for the following tasks:

- typing letters, formal reports, information requests as required by director and staff;
- filing incoming and outgoing correspondence, as well as microfiche, forms, index cards, pamphlets, and other information center materials;
- maintaining records on microfiche received by the information center, and producing hard copy from the microfiche reader/printer
- keypunching computer logic for ERIC searches;
- receiving incoming microfiche, posting data for monthly tabulation, utilizing reader/printer to scan, select, and print appropriate pages for clients;
- sorting a large volume of computer printouts of actual ERIC abstracts, checking file information for correctness of order, posting varied information and refiling.

Technical Processing Procedures (Information Retrieval and Dissemination)

FY 74 saw Project Communicate begin its preparation for a permanent union with the existing KSDE information system. The Project continues to be organizationally located in the Division of Development, with the Project director assuming expanded duties as the director of a new Information Services and Retrieval Section. It should be noted, however, that the name Project Communicate was retained since its state-wide service mission was best known to most client groups by that descriptor.

The information systems program presently functioning within the KSDE finds the Information Services Director, illustrator and existing publications staff functioning with Project Communicate staff. That working union has been enhanced by a physical consolidation of Project Communicate offices with the KSDE professional library. The intent is to interface information services, information retrieval and the library into a single information systems unit.

Information Services Available During FY 74

Several basic shifts in the kinds of information services available to client and client-groups occurred during FY 74. Table 8 illustrates differences between the first nineteen months (December, 1971 - June 30, 1973) and last twelve months (July 1, 1973 - June 30, 1974) of project activity.

The objectives of the FY 74 program obviously had to be geared to a different service reality after June 30, 1974. Previous requests for information services, for example, had suggested a real demand for curricular materials. Project staff accordingly responded with a catalog that permitted clients to order some 1500 ERIC curriculum guidelines without resorting to an original computer search. The catalog contains 1518 computer printouts classified into six (6) volumes according to instructional area. The volumes of the catalog are classified as follows:

I. Vocational, Technical Education
II. Language Arts

III. Social Science
IV. Music Foreign Languages
V. Math, Sciences, Environmental Education
VI. Special Education, Health and Family Living, Physical Education, Driver's Education

The abstracts contained therein are descriptions of documents which can be ordered from ERIC Retrieval at the KSDE. One set of the six-volume catalog was provided for each participating district, with the promise that one more set would be furnished for every portable microfiche reader purchased for their attendance centers. This subtle form of coercion attempted to get a number of portable readers into Kansas schools, thereby introducing the ERIC curriculum materials to local educators via the concept of microfiche.

One of the six major objectives of the FY 74 program was to support the development and utilization of education information systems in the four largest urban school systems in Kansas (i.e.), Kansas City, Shawnee Mission, Topeka and Wichita). Again with an eye to the future, Project staff sought to stimulate greater utilization of information resources already available within each of these urban communities. It was known that supervisory, research and evaluation and library personnel in each of the affected school systems had proximity to complete ERIC collections at one of the state universities or colleges nearby. As an incentive, Project Communicate offered "sample" computer searches of the ERIC files, as well as copies of the curriculum catalog. The Project also arranged for microfiche duplication equipment to be placed in nearby libraries housing ERIC collections.

Another FY 74 objective was the expansion of information services beyond the original pilot region to new rural districts. Thirty-one districts were contacted and offered a grant of information services which included ERIC curriculum catalogs, original computer searches, documents and pages of hard copy. Microfiche readers were the only item that had to be supplied by each district. During FY 75, these services are being offered by the KSDE to school districts at a stated dollar amount, with local leadership again setting their own priorities for computer searches, documents and hard copy.

At the conclusion of FY 74, Project Communicate had bibliographical access on computer tapes to RIE, CIJE, and AIM/ARM files.

Methods Of Linking

Services to Original Pilot Region Districts

As discussed in Chapter I the first nineteen months of Project activity were conducted in a pilot region embracing fourteen school districts. Four levels of information service were provided, ranging from total information system support (Level IV) to very basic system support when requested (Level I). Service emphasis in these districts shifted during FY 74 to the extent that extension agent support to Levels III and IV school districts was abandoned. All pilot region districts, including Levels I and II, received direct assistance from the director and training specialist in the identification and training of their own local linkers.

Services To New Client Groups

Urban School Districts — FY 74 activity stressed the development and utilization of educational information systems in the four largest urban school districts in Kansas. The task was to identify and train local linkers who could take full advantage of Project resources and the ERIC collection at university libraries in their immediate locales. Training was offered to school district personnel identified as having the greatest potential for establishing successful linkages to in-district user groups. It is noted that these four urban school districts enrolled 160,000 students or forty percent of the state total and employed more 8,000 certificated staff.

Rural School Districts — The Project's information system services were expanded beyond the original thirteen rural districts to an additional eighteen districts via direct staff contact and the introductory distribution of a "free" package of information services. The project objective was to bring a minimum of ***twenty*** additional rural districts on board.

Other "Linking" Concerns — Additional Project objectives for FY 74 saw more meaningful linkages to clients tied to an efficient utilization of resources within the KSDE. One such vehicle was the development of a monthly ***Newsletter*** that reviewed project services and activities. (See Appendix D).

Project staff also focused on the training of selected SEA staff in the use of available in-house information system technology, thereby functioning as information linkers within their respective sections. A ***remote job entry terminal*** operating within the SEA building was viewed as being a practical innovation only to the entent that staff had the skills and understandings essential to the conduct of their own information searches, thus utilizing the full input and output potential of a computerized information system.

Finally, educators throughout Kansas were encouraged to submit for possible inclusion in the national ERIC collection information descriptive of significant school and classroom innovations. Solicitation of these inputs recognized that activities which were deemed as potentially useful contributions to professional practice should be disseminated for the benefit of all educators. This objective was part of an effort to get Kansas school people to accept greater responsibility for the dissemination of promising instructional innovations through personal contributions to the national information system. Appropriate plugs in that direction were a regular feature of the Project Communicate ***Newsletter***.

Evaluation Of Project Activities (FY 74)

Basic Evaluation Scheme

Evaluation of Kansas/Project Communicate was performed in accordance with the project's developmental and operational objectives. ***Developmental evaluation*** determined when all goal components had truly become functional, and ***operational evaluation*** was performed to assess the effectiveness of the project's operational (search and retrieval) components.

Developmental Evaluation (A Measure of Project Goal Attainments) — The objectives specified in the proposal document emphasized the establishment of information linkages that would promote the adoption of innovative instructional practices in Kansas classrooms. A linkage was defined as the interaction between individuals and systems wherein the roles of conveyor, consultant (extension agent), trainer, innovator, knowledge builder, practitioner, and user are identified. As an independent variable, a linkage served as the key factor in the adoption and diffusion of educational innovations.

Operational Evaluation (A Measure of Service Effectiveness) — Evaluation of project services included the collection of data describing the type and frequency of information system inputs and outputs. Emphasis was placed on ***demonstrated effectiveness*** rather than on a chronological review of project growth. The director conceived the task of Kansas/Project Communicate as directly supporting change in local classrooms. Accordingly, the hard data reported under Operational Evaluation describe project success in serving immediate users during FY 74. The extent to which the project efficiently serviced its clients also lends itself to a subjective evaluation of FY 74 role performance by both director and project staff. Those reflections constitute a generalized reaction to the last twelve months of project activity.

Evaluation of FY 74 Project Objectives

A number of evaluation indices were developed over the three years of Project activity. Data of both the "hard" and "soft" variety were used to monitor and formally assess each phase of Project development. As the Table 9 suggests, the FY 74 programs transitional objectives required staff to concern themselves with considerably more than the technical mechanics of producing a usable product. The enlarged service audience was generally unfamiliar with the notion of information search and retrieval. Few clients or client groups were notable users of education information, a reality which obviously compounded the task of establishing a viable dissemination network. Evaluation procedures had to accordingly direct special attention to the extent that the service audience had become comfortable with the notion of a computer-based information system and would value it to the extent that it would be tapped on a sustained basis.

Analysis Of Evaluation Data And Findings

This section contains performance appraisal information descriptive of 1973-74 Project operations. That information includes: (1) an analysis of data related to the attainment of Project objectives; (2) an analysis of data reporting the frequency and type of service outputs to clients; (3) a report of client rankings of Project services; (4) the subjective reactions of the project director and supporting staff to FY 74 activities.

Developmental Evaluation Data

Information Utilization Index

As described earlier in this *Report*, the utilization index was an attempt to measure the impact of acquired information on the Project's service audiences. The utilization formula combines the variables of complexity, innovativeness and adoption in multiplicative fashion to give the evaluator an estimate of client and/or district utilization. Table 10 **(page 44)** contrasts the U. I. scores for the three client groups (i.e., pilot region districts, new rural districts and urban districts) serviced during FY 74 and suggests a pattern of utilization that does not support an appreciable discrepancy between the three in their utilization scores.

Figure 5 **(page 45)** contrasts the U. I. rankings for clients serviced during both the *developmental* and *transitional* phases of Project activity. It shows that the highest U. I. rankings were obtained by those developmental-phase clients who were directly serviced by an extension agent. Additionally, the data points to a general decline in each school district's capacity for full utilization of information services during FY 74 when extension agent skills were unavailable to them.

Operational Evaluation Data

Project Services to Kansas Clients:

The most appropriate introduction to the range of activities provided by the project during FY 74 is to examine the summary report of delivered information services described in Table 11 **(page 46)**. The statistics reported therein show productivity over the entire life of the Project -- that is, the developmental as well as the transitional phases. Search production remained constant although the request pattern was somewhat altered by the emergence of new client groups (e.g., higher education personnel).

The availability of Curriculum Guides to the ERIC Catalog during FY 74 accounted for the increase in the amount of microfiche produced and hardcopy pages supplied. More than 163,000 abstracts of RIE and CIJE documents were produced for all clients during the life of the Project. Table 12 (page 47) shows that FY 74 information requests included a larger percentage of curriculum guides rather

than follow-up computer search orders. That circumstance was especially true for the eighteen new rural districts that had not originally had the services of an extension agent to demonstrate the full capacity of an information search and retrieval system.

Client Evaluation of Project Services:

Formal appraisal to the Project's operational effectiveness looked at three evaluation dimensions: (1) client rankings of the Project's search and retrieval services; (2) client rankings of the curriculum guides; and, (3) an assessment of the Project *Newsletter* dissemination impact. The Project utilized standardized information request and client evaluation forms (See Appendix A and B) that were returned by mail. The evaluation form asked each respondent to rate the information received for its quality, stating how they or their staff used the information, and to make any additional open-ended comments as required.

Table 13 reports subjective evaluation data from the client request and evaluation form which assessed the Project's search and retrieval services. (see Appendix A for form used).

Some differences are noted between the two client groups reported in terms of their perceptions of information adequacy. Further generalizations about differences between urban and rural districts would be tenuous at best because each population is not numerically comparable. It was obvious to project staff, however, that receptivity to the need for information system services was more observable in the rural school districts. (See Appendix B for form used).

Table 14 reports the client rankings for the curriculum guides made available during FY 74. The potential impact of the guides on classroom innovation cannot be completely judged by an inspection of this data. In general, orders for the guides were encouraging during FY 74, and that circumstances might be construed as a necessary first step in the movement toward full information system utilization.

Table 15 reports the reactions of a ten per cent random sample of individuals who were to receive the Project *Newsletter*. It is extremely difficult to gauge the impact of this kind of dissemination tool on a service audience. It might be argued, however, that the *Newsletter* did increase the level of awareness about the Project's activities especially in rural districts that more generally demonstrated receptivity to the need for this kind of educational service. (See Appendix C for form used).

Subjective Evaluation of FY 74 Services by Project Director and Staff

Kansas/Project Communicate attempted to evaluate goal attainment during the transitional phase with as much objectivity as its resources permitted. Project staff was committed to the need for that type of evaluation. Nevertheless, the management of any innovative project, however, provides each employee with a variety of new experiences, the recitation of which can add much to a total evaluation profile. Those perceptions are reported below by job category.

Project Director

The transition from *the extension agent* to *local linker* during FY 74 was a challenging experience for Project staff. In-service training had to provide rural and urban linkers with *all* the skills of an extension agent within an unrealistically brief time span.

There was a discernable loss in Project effectiveness through the utilization of local linkers. In retrospect, it would have been more desirable if the director and training specialist had been able to

select appropriate local linkers, and not leave that choice entirely to district superintendents.

The local linker concept, based on a one year trial effort, leaves an inference that such individuals must be strong advocates of the innovative concepts they have searched, as well as ardent supporters of information retrieval in general.

Many leadership personnel at the school district level did not use their status and influence to promote faculty and staff utilization of the project's services. A deeper concern for the long term must be the extent to which local educational leadership really understand the purposes and ultimate value of a computer-based information system.

The six-volume ERIC curriculum catalog did get curriculum materials into many Kansas classrooms. Equally important, the catalog acquainted a large professional audience with the potential value of a state-wide education information system.

Training Specialist

Training of linkers at the local level has to be more intense and sustained during the school year, perhaps through the utilization of a "programmed" package of instructional materials.

The Project *Newsletter* must be continued to keep concerned local linkers and district leadership appraised of the full range of SEA information center services.

Inservice training for local linkers should be structured around information areas of *current interest* (e.g., topics like teacher evaluation or open education). Ideally, these sessions would begin at the start of the school year and be sustained via formal reassembly sessions for the trainees.

Administrative matters related to contract negotiation and information package sales should be finalized with enough lead time to avoid unnecessary log jams and delays in the delivery of services.

Local linker training will be more meaningful if trainees have an opportunity to visit the KSDE information center and visually operationalize the full range of services available to them.

The local linker concept must be viewed as strictly *developmental* at this juncture in Kansas information system evolution. The requisition of necessary skills and understandings by these people will require more intensive training than has been available up to this point. Additionally, district leadership has to promote the use of a state-wide information and retrieval system, and encourage qualified staff to utilize the resources available through the SEA information center.

Information Specialist

Even if one has a background in both public education and library science, a period of intense orientation to an information system project will still be in order. Most beneficial are trips to similar projects, dissemination conference and and an ERIC clearing house.

The information specialist must be knowledgeable in a variety of educational areas. Time *must* be allotted for a perusal of current journals and documents. Project Communicate must expand its data base if it is to be competitive with other information services. Plans have been made and work begun on cataloging both on-hand and incoming fugitive documents, as well as in-house publications. Future efforts include expanding the existing KSDE collection and making them available on microfiche. Books from the KSDE professional library and fugitive documents are presently available in hard copy on a limited loan basis.

A new search capability at the center now provides for searching ERIC files by major descriptors and identifiers. This capability provides searches containing more pertinent documents, with less need for screening by the information specialist.

Rapport with other KSDE staff rates a top priority, with the ultimate goal being the establishment of Project Communicate as the first contact when an information request is received. To date, that circumstance is not evident a management initiative will be needed to accomplish that goal.

All in-house journals indexed in CIJE are now located in the Project Communicate complex. This modification has simplified the copying process and eliminated unnecessary duplicate subscriptions. The arrangement with a periodical print-out service for access to additional journals coupled with the already existing exchange with Washburn University (Topeka) makes journal article acquisition very accessible.

Even though Project Communicate funding procedures have changed, and its FY 75 operations considerably altered, the duties of the information specialist will remain basically unchanged. Most of the specialist KSDE work time will be spent writing logic for, submitting, and screening searches.

In order to strengthen the "local linker" concept, inservice training needs to be sustained throughout a school year. It cannot be a "one-shot" effort. The information specialist should be directly involved at some logical point in these preparatory programs.

Information Writer

The writer in developing Project publications:

- gained proficiency in the language of educators.
- became better acquainted with KSDE staff members and their roles.
- became involved in the mainstream of Project activities.
- learned more about retrieval and dissemination activities at the national level.

The following suggestions are made for the improvement of the writer's role:

- Director and staff should annually select a minimum of six topics suitable for development of informational summaries and bibliographies for completion within a specified period.
- All written reports concerning project activities should be a major responsibility of the writer, supported by necessary information from director and supporting staff.
- Feature-type material concerning the Project should be developed as handouts for educators and laymen.
- Very specific material should be developed as information for the state budget director and members of the Legislature.

Summary, Conclusions And Recommendations

Summary of Project Goals and Activities, FY 74

Kansas/Project Communicate was a state-wide information diffusion network operating within the Kansas State Department of Education. As stated earlier, its original purpose was to develop and sustain a client-centered information system that would effectuate the linkage necessary for the eventual adoption of innovative instructional practices in Kansas schools and classrooms, and generally increase the use of educational information by teachers and administrators in decision making. The developmental phase of activity provided information system support to a pilot region composed of twelve school districts, with those districts differentially receiving *four* levels of information support. Three additional units received either full or partial information services. Project Communicate made use of full-time extension agents to facilitate information utilization and adoption in those districts that were programmed to receive in-depth service.

The FY 74 program did not continue the extension-agent service, redirecting its efforts instead to the training of local linkers who could function as resource persons in their home districts. Linkers received training for their new roles from Project staff members. The scope of project activity during FY 74 was broadened to involve eighteen new rural districts and three new urban districts. FY 74 was also the concluding year of Project Communicate activity with federal financial support. Its objectives, therefore, spoke to the impending reality of a full financial conversion to local and state resources by July 1, 1974.

Objective No. 1: To maintain services in pilot region school districts to the fullest extent possible. Emphasis shifted to the *identification* and *training* of local linkers in these districts. Extension agent activities which included question negotiation and processing of information requests were discontinued, with the director and training specialist assuming primary responsibility for local linker preparation.

Objective No. 2: To support the development and utilization of educational information systems in four Kansas urban school systems (i.e., Kansas City, Shawnee Mission, Topeka and Wichita). Although a capacity for information search and retrieval already existed in those districts, the task was to identify and train local linkers who could effectively use project resources as well as the ERIC collections at university or college libraries in their home communities. Training was offered to professional staff identified as having a potential for establishing successful linkages to information consumers in their districts.

Objective No. 3: To expand existing information services beyond the pilot region to new rural districts through the distribution of a "package of information services." The intent of the information package was to demonstrate the potential of an education information system and to provide each district with access to literature searches and documents from RIE and CIJE.

Objective No. 4: To selectively disseminate information about the full range of Project services via a monthly Newsletter. That vehicle provided: (1) information about ERIC and other information resources; (2) up-dated educational information of interest to school personnel already functioning as linkers; (3) reports on Project inservice activities completed and proposed; (4) reports on classroom innovations currently underway in Kansas schools.

Objective No. 5: To train selected State Department of Education staff for the full utilization of information system services, and for functioning as linkers within their respective operational divisions and sections. Personnel serving in various operational divisions (e.g., curriculum services, planning, research and evaluation, vocational education, guidance and others) would be trained to assume responsibility for information search and retrieval, including the writing of logic for computer searching.

Objective No. 6: To submit to the national ERIC collection information descriptive of school and classroom innovations in Kansas. Inclusion of these inputs recognized that innovative activities in Kansas schools and classrooms which contributed significantly to educational change and/or organizational renewal should be disseminated for the mutual benefit of all educators.

Objective No. 7: To fully operationalize all procedures necessary for the financial conversion of Project Communicate activities from federal to state and local revenue sources. The conversion process recognized the SEA's impending responsibility for the maintenance and further refinement of the existing information center and client service network.

Conclusions Drawn From Evaluation Data

Objective No. 1: Services were maintained in pilot region schools during the final year of federally-supported activity. It would be a sin of omission if the impact of extension agent support on total system development was not mentioned. The involvement of those operatives in pilot region districts accounted for much of the Project's success during its developmental stages. Public school educators do not appear by *training* or *inclination* to be avid pursuers of information, including data made available to them via the computer-assisted route. The Project staff has to be persistant to insure that they understand the full potential of the search and retrieval process, and develop the self-assurance necessary to use acquired information in the most expeditious way. Pilot district personnel that had that kind of up-front support showed more staying power than those who were serviced by

the Project in less supportive ways. Information utilization was down in the pilot region during FY 74, but the best available evidence suggests that a firmer foundation for information utilization was laid in those districts that had the initial benefit of extension-agent support.

Objective No. 2: Simply stated, Project staff were not completely happy with the level of receptivity found in the four urban districts. A concerted effort was made to train local linkers in each of these districts, and beyond that, to insure that each made full use of the ERIC collections readily available at a nearby university library. In almost all cases, the response by district leadership was less than enthusiastic for reasons that were initially hard to comprehend. It would appear that the Project was partially compromised by *guilt by association*. That is, it was a creature of the state education agency in Kansas, and therefore was viewed as having nothing substantive to offer urban school systems. That estrangement is part of the political thinking of many urban educators in Kansas, and it compounds the job of trying to get a full appreciation of the resources the project is prepared to offer. Project services will eventually reach these districts in force, but it must be viewed as a struggle against political cleavages of long-standing between the state's diverse and autonomous educational units.

Objective No. 3: The package of information services offered to eighteen new rural districts did result in a heavy demand for literature searches and microfiche. That response was attributable in part to the popularity of the curriculum guides that were a part of the package. As mentioned earlier, rural districts have been responsive to services which provided information that was not readily attainable from local resource centers. For example, regionally located university or college libraries had ERIC collections but did not provide the kind of dissemination service made available by the Project.

Objective No. 4: The *Newsletter* can be viewed as having had a mixed impact on the receiving audience. Our data suggests that those who had a predisposition to use the Project's services read the *Newsletter* while others tended to view it as just another KSDE "thing" to be quickly persued and disregarded. More impact on potential clients was probably obtained by providing school districts with quality services that spread the word to others.

Objectives No. 5: The extent to which KSDE staff used or did not use the information services of the project can be viewed as a "cultural" circumstance of the particular division or section. Most operational components of the State Department of Education serve primarily in a regulatory capacity. That is, they are not at the present time in the vanguard of curricular or instructional change in Kansas education. Without that kind of legislatively-sanctioned mission, the Department has not attracted a professional staff that would by necessity be consumers of educational information on a major scale. Some sections, of course, did use the services of the Project, but it would be more accurate to suggest that we will have to legislatively alter the Department's principal mission to insure that instructional and curricular matters are viewed from an applied or pure research base that supports classroom practice rather than as a strictly regulatory or credentialing agency.

Objective No. 6: Progress has been minimal in getting innovations in Kansas schools submitted for inclusion in ERIC. The obvious need is for more leadership awareness in public schools of the importance of boosting what has been accomplished. A willingness to take that step turns on the competitiveness of those individuals, and their willingness to take the time to formalize their accomplishments in a fashion fit for publication.

Objective No. 7: At this writing, Project Communicate has been functioning with an expanded range of services since federal funding terminated on June 30, 1974. The KSDE made a decision not to finance the project with Title V (i.e., federal support) but rather to change the means of product delivery, utilizing state and local resources. State Legislation in 1974 permitted the KSDE (i.e., Pro-

ject Communicate) to offer information services to client school districts on a contract basis. Additionally, the FY 75 conversion strategy called for the merger of the Project within the existing Information Services Section of the Department, thereby creating a new Information Services and Retrieval Section. The director of Project Communicate now serves as the head of that reorganized section.

Summary and Recommendations of the Project Director

The operational impact of Kansas/Project Communicate must be understood in the social and economic context of the region served. Kansas has historically been a predominantly agricultural state, composed of numerous small rural communities with equally small school districts scattered over a large geographic area. There are more than 300 unified school districts in the state with an average enrollment of 750 pupils. Approximately forty per cent of the state's 225,000 public school students are enrolled in four urban districts.

Support for public education in Kansas cannot be favorably compared with the larger states in the nation. Scarce financial resources, for example, have severely limited the service role that can be provided by the State Department of Education. A total of 116 professionals are expected to support the needs of all school districts within the state. The net result is a state education agency that by statute is essentially limited to a regulatory function, and thus has not been viewed by many educators as an institutional resource that can provide assistance in many *substantive* areas affecting schools. This statutory focus on *procedural* matters tends to perpetuate a belief on the part of some public school leaders that one simply does not look to the KSDE for help in the "heavier" areas.

Project Communicate is probably the first undertaking by the State Department that moved that agency into an innovative role in direct support of classroom change. Admittedly, the Project has had to live with much of the negative residue of the past, but our performance and continuing growth without federal assistance during the current year suggests that we have developed major inroads for the KSDE that support its mission as a viable force for change.

The total developmental life of Project Communicate is not reported in this document, but the reader is referred to an *extensive* interim reported in ERIC that covers the period from December 1, 1971 through June 30, 1973. This report has dealt with the Project's developmental phase, transitional phase, and briefly touched on the total conversion to state and local resources during FY 75. Some final recommendations are offered in summarization of this Kansas State Department of Education's effort to establish a state-wide information system that could support innovation and change in Kansas schools and classrooms.

Final Recommendations

The field/based extension agent who can solicit and entertain requests for information from administrators, teachers and other school personnel should be viewed as a critical operative in the development of a viable information dissemination system. Data which permitted comparison of extension agent as opposed to local linker effectiveness pointed to a wide performance differential in favor of the former. In the context of this Project, the role of the extension agent *could not* be challenged as the most efficient purveyor of project services to client districts.

The training and full utilization of local linkers in LEA's should be evaluated in the context of district to be served, with special attention addressed to the seriousness with which the designated individual and his or her employer see real potential in these services. A linker has to be an enthusiastic spokesman for computer-based information systems, and be sufficiently trained to service individual requests. Constraints upon the individual's time or a limited commitment to the system's purposes can severely short-cut the local linker's programmatic effectiveness.

Developmental activity in a program like Project Communicate must permit considerable experimentation with the kinds of delivery systems most suited to the needs of our client audiences. Although experimental and control situations are not always perfect in projects of this type, it is abundantly clear that the information center staff must have a capacity to try a variety of strategies that can furnish baseline data on the most viable dissemination options. A number of procedures were used to insure that districts could plug in to the resources of the Project. The ability to remain flexible during the developmental stage meant that the eventual transition to local or state resources was based on data that pointed to the most appropriate delivery system for a program that would have to be partially self/sustaining.

It is imperative that professional support for information system utilization be garnered from outside agencies and key individuals who can attest to the value of having those kinds of resources available at the district level. The viability of an information dissemination system often turns on the availability of spokesmen within a region who can articulate the advantages of computer-based information network. Project staff cannot do that job alone and will require the continuing support of concerned educators in universities and colleges, public schools and other educational agencies who can reinforce the gains accruing to districts who plug into the system.

A viable state-wide information network must be willing to cope with the reluctance of many to use educational information by applying strategies that reach practitioners at a place where the process makes sense. Public education in Kansas and elsewhere is not an endless pursuit of academic truth. Our clients are busy with immediate day-to-day concerns and are not heavily into the literature to get the answers. It would be wonderful if more were that way, but our purposes and goals will best be served by demonstrating to practitioners how information can be made readily available to them for immediate use. That development will not occur unless the information center staff is committed to trying a variety of techniques that can *sell* the service. That salesmanship orientation is a must in projects of this type.

TABLE 8

KANSAS/PROJECT COMMUNICATE
COMPARISON OF FY 73 AND FY 74 INFORMATION
SERVICES PROVIDED TO CLIENT AND CLIENT GROUPS

TYPE OF SERVICE	FY 73	FY 74
Contact with Clients	Field Agents; Direct Mailing to Processing Center (KSDE)	Local Linkers in Participating Districts
Number of Searches, Documents, Articles Furnished	Unlimited Number Provided	"Package of Information Services" For Participating Districts
Fulfilling Requests For Curriculum Guides	Original Computer Searches	Direct Order From Curriculum Catalog
Other Requests For Services	Original Computer Searches	Original Computer Searches
Project Information Capability	ERIC, Fugitive Materials	ERIC, CIJE, ALERT Fugitive Materials

TABLE 9
METHODS OF EVALUATING FY 74 OBJECTIVES
KANSAS/PROJECT COMMUNICATE

OBJECTIVE	METHOD OF EVALUATION
I. To maintain services in pilot region schools to the fullest extent possible.	-- Utilization Index -- Operational Data suggestive of sustained client or client-group response
II. To support the development and utilization of educational information systems in Kansas urban school districts.	-- Operational Data suggestive of sustained client or client-group response
III. To expand existing information services beyond the original pilot region to new rural districts.	-- Utilization Index -- Operational data suggestive of sustained client or client-group response -- Curriculum catalog
IV. To selectively disseminate information about the full range of project services via a monthly newsletter.	-- A questionnaire sent to a random sample of potential information users in the LEA's (Appendix C)
V. To train selected KSDE staff for the full utilization of information system services.	-- Operational data suggestive of sustained division or section response within the KSDE
VI. To encourage Kansas educators to submit information descriptive of school and classroom innovation to the national ERIC files.	-- A log of material submitted by KSDE and accepted by ERIC clearinghouses

VII.	To operationalize all procedures necessary for the financial conversion of project activities from federal to state revenues.	-- Legislative action that authorized sale of services by SEA -- Financial commitment of state legislature -- Extent to which districts financially supported a part of the KSDE information services project

TABLE 10
INFORMATION UTILIZATION INDEX SCORES: POSSIBLE RANGE 0.50 - 125.50
KANSAS/PROJECT COMMUNICATE
JULY 1, 1973 - JUNE 30, 1974

Client or Client-Group	N*	Percentiles 10	25	50	75	90
Pilot Districts	110	5.00	9.88	15.50	21.79	27.88
New Rural Districts	120	5.57	8.25	15.02	20.69	27.50
Urban Districts	39	6.92	8.88	11.50	18.50	25.83

*Number of clients

Figure 5

PERCENTILE RANKS
FOR THE UTILIZATION INDEX
DEVELOPMENT AND TRANSITION PHASES
KANSAS/PROJECT COMMUNICATE

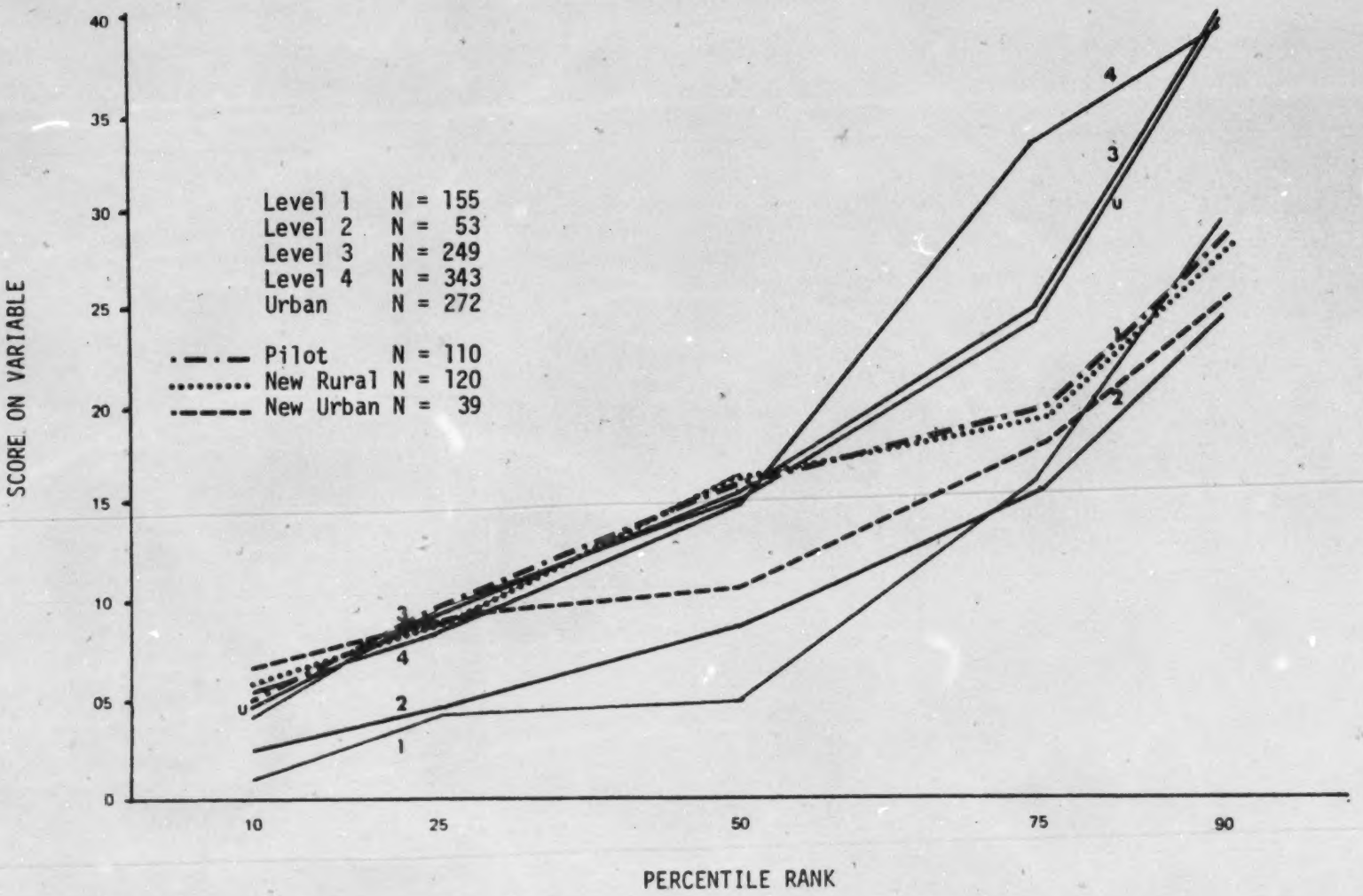

TABLE 11
STATISTICAL REPORT ON INFORMATION SERVICES
DEVELOPMENTAL AND TRANSITIONAL PHASES
KANSAS/PROJECT COMMUNICATE

Searches	Developmental Phase 12/1/71-6/30/73	Transitional Phase FY 74	Total
Teacher	1,055	306	1,361
Administrator	232	126	358
Board Member	1	0	1
KSDE	191	127	318
Patron	1	0	1
Student	3	14	17
Librarian	57	14	71
Non-Certified	2	0	2
Counselor	33	18	51
Other	70	197	267
TOTALS	1,645	802	2,447
Curriculum Guide Orders		531	531
*Computer Searches (RIE)	1,276	1,309	2,585
*Computer Searches (CIJE)	1,054	1,274	2,328
Abstracts Printed (RIE)	76,673	41,903	118,576
Abstracts Printed (CIJE)	23,086	21,401	44,487
Microfiche titles supplied	5,896	6,152	12,048
Microfiche reproduced	12,236	16,402	28,638
Hardcopy pages supplied	4,825	8,344	13,169
Journal articles supplied	1,359	355	1,714
Extended School Year	343	177	520
Open Education	901	414	1,315
The Mini-Course: A Promising Technique	1,988	79	2,067

*Project Communicate search program installed 1 July 72.

TABLE 12
CLIENT SERVICE REQUESTS, FY 74
KANSAS/PROJECT COMMUNICATE

Client Groups	Total Information Requests	Computer Searches	Curriculum Catalog Orders
Pilot Districts (N=13)	311	132 (42.4%)	179 (57.6%)
New Rural Districts (N=18)	501	134 (26.7%)	367 (73.3%)

TABLE 13
CLIENT RANKING OF PROJECT INFORMATION SERVICES
KANSAS/PROJECT COMMUNICATE, FY 74

Item 1. (Information Adequacy)	% Excellent	% Very Good	% Good	% Fair	% Poor
Urban Districts *	14.8	29.6	29.8	22.8	3.7
Rural Districts *	30.4	33.8	20.2	9.9	5.7

Item 2. (Information Use By Individuals)	For Classroom Units	For Curriculum Revision	For Adm. Decision Making	For Professional Growth	Other
Urban Districts	7	7	14	12	4
Rural Districts	88	92	76	112	24

Item 3. (Others in District Who Used Information)	Average use by other parties
Urban Districts	2.81
Rural Districts	4.38

Item 4. (Time of Use)	Already Used	In Near Future	In Three Months	Months	Will Not Use
Urban Districts	16	13	0	0	1
Rural Districts	132	76	29	18	18

*Urban: N=27
*Rural: N=243

TABLE 14
CLIENT RANKING OF CURRICULUM GUIDES
KANSAS/PROJECT COMMUNICATE
FY 74

Item 1. (Information Adequacy)	% Excellent	% Very Good	% Good	% Fair	% Poor
N=195	30.0	42.0	22.0	6.0	0.005

Item 2. (Information Use By Individuals)	For Classroom Units	For Curriculum Revision	For Adm. Decision Making	Other
N=195	121	101	27	22

Item 3. (Time of Use)	Already Used	In Near Future	Next School Year	Will Not Use
N=195	131	45	95	5

Item 4. (Access to Reader)	Yes	No
N=195	158	30

Item 5. (Others in District who Used the Information)	Average use by other parties
N=195	2.18

TABLE 15
PROJECT NEWSLETTER EVALUATION*
(REPORTED IN PERCENTAGES)
KANSAS/PROJECT COMMUNICATE
July 1, 1973 - June 30, 1974

Item	Response (%)
Did you receive the Newsletter?	92.0
Did you not receive the Newsletter?	8.0
Did the Newsletter remind you of how the Project could be of service to you?	82.0
Did you view the Newsletter as just another piece of junk mail?	18.0
Did you know you had access to Project services prior to receiving the Newsletter?	80.0
Was your receipt of the Newsletter your first indication of access to Project services?	20.0
Did you follow through on any activities suggested in the Newsletter?	
--- Order Curriculum Guides from ERIC catalog?	32.0
--- Request a literature search?	22.0
--- Send for materials listed as available free or for a small charge?	22.0
--- Contact another school about innovative programs/practices in progress?	0.08

*N = 96 (i.e., a 10 per cent random sample of clients and potential clients in rural school districts)

CHAPTER III — FROM TRANSITION TO IMPLEMENTATION, FY 75

Objectives and Stated Limitation:

As described in Chapter II, Kansas/Project Communicate now functions within the newly reorganized Information Services and Retrieval Section of the SEA. At this writing, the Project has on contract ninety-five school districts, fourteen colleges and universities, the Kansas/National Education Association and five adult education centers. Those organizations account for more than one-third of the practicing educators within the state. The Project's operational objectives for FY 75 include the following:

- To obtain contracts from LEA's that will facilitate an expansion of KSDE information system services.
- To sustain utilization of the emerging state-wide information system, thereby supporting organizational and educational renewal in Kansas school districts.
- To assist school districts contracting for services in the identification and actual preparation of local information system linkers.
- To conduct regional workshops that can provide linkers with instruction that supports their local dissemination mission.
- To continue development of the Kansas Information Diffusion System (KIDS) under the direction of Information Services and Retrieval Section of the KSDE.

Contracts were offered to school districts and other educational institutions during FY 75 in the amount of $500.00, $1,000.00, or $1,500.00 as was the case during the previous year. The major difference at the present time is the direct purchase of the Project's services with LEA funds.

Table 16 describes the Project's current operations via a comparison with the "developmental" and "transitional" concerns of the previous two years.

The Project's movement to full maturity during FY 75 has not been without its fair share of problems. For example, the "free" services to clients offered during the previous two years now had to be purchased under the contract provisions described earlier. Legislative action (Appendix E) was mandated before the SEA could embark on such a unique entrepreneurial venture. With that legal sanction obtained, the machinery of state government was still ill prepared for its new role as a non-profit making vendor. By way of example, there were no state forms to expedite a contractual relationship between the KSDE information center and the requesting LEA's. Nor was the existing financial apparatus prepared to accept contract payments for information services that were yet to be rendered.

The bureaucracy of state government was dealing during FY 75 with a new kind of service role, and its general state of unpreparedness meant unfortunate delays in the delivery of Project services. Approximately six weeks was required to get individual contracts (Appendix E) approved. Those battles have been won, but not without considerable frustration for the Project Director and his staff.

The actual sale of contracted services required an inordinate amount of planning time, simply because Kansas lacked regional educational support agencies that would be the most logical customers for information services on a cost-sharing basis. The Project did concentrate a good part of its effort on special education cooperatives whose ultimate purchase of contracted services opened participation to small districts who could only justify access to the information system through their contribution to the "coop" budget. A similar emphasis was placed on selling the service to school districts whose geographic location suggested eventual membership in a regionally-based educational service center.

Organizational Overview

Most of the FY 75 operating budget consisted of contracts from SEA's. However, the Project had to operate within the constraints of agency budget. In other words, contracts could not exceed $55,000. This budget did not allow for the full compliment of staff that was present during FY 74. The training specialist, whose duties were to assist the director in identifying and providing training for local linkers, was transferred to another section within the agency. The Information Writer, whose duties included compiling information for and writing the Project Newsletter, was hired half-time. This allowed three and one-half positions; the Project Director, Information Specialist, Secretary, and a half-time Information Writer, to meet the stated program objectives.

From Diffusion To Dissemination

If there are "hindsight" hang-ups about any past Project direction, they would probably revolve around the minimization of the field-based extension agent's role. The findings detailed earlier in this Report pointed to the positive impact of the extension agent in getting clients to follow through with newly acquired information. The formal abandonment of that emphasis meant that many districts never really got a handle on all the implications of a computer-based search and retrieval system. At the present time, many districts are having difficulty expending the funds they originally contracted for. It appears to be a case of not knowing what to do with information system services even when you have paid access to them. The same confusion about purposes applies to the manner in which some LEA's have allocated money for information services. In too many cases, the contract was purchased as an innovative add-on feature without too much thought given to its potential value in facilitating district-wide change. Those circumstances might not have emerged if earlier dollar commitments had permitted a more meaningful educational program for potential users through the services of the field-based extension agent. Without that kind of instructional ground work, the Project must live with the fear of an educational audience that is buying into a support service without fully appreciating its real potential for change. The extent to which that circumstance is true will be a major test over the short term.

TABLE 16

KANSAS/PROJECT COMMUNICATE GROWTH CHART
FISCAL YEARS 1973, 1974 AND 1975
KANSAS STATE DEPARTMENT OF EDUCATION

FISCAL YEAR	1973 (developmental)	1974 (transitional)	1975 (operational)
Client Agencies	13 school districts	35 school districts	115 clients (school districts and other agencies)
Funding	$156,000 (Federal)	$90,000 (Federal)	$20,000 (state)* $55,000 (LEA's and other agencies)
State Department Role	a. Develop hardware and software components	a. Expand services to 31 rural and 4 urban LEA's	a. Provide literature search and retrieval services
	b. Develop information center job descriptions and field test	b. Instruct local linkers in information system utilization	b. Conduct regional workshops on information utilization
	c. Evaluate developmental objectives	c. Provide descriptive Newsletter to LEA's	c. Evaluate operational objectives
	d. Utilize extension agents in pilot region districts	d. Evaluate transitional phase objectives	

*State Treasury

BIBLIOGRAPHY

Herlig, Richard. *Identifying Latent Innovation in Education* . Unpublished, PhD. dissertation, University of Missouri (Columbia), 1971.

Herlig, Richard. *Kansas/Project Communicate: A Program for the Development of a Comprehensive State Education Information System—Interim Report.* (ED 103 019)

Herlig, Richard. *The Role of the Educational Extension Agent in Information Utilization.* Kansas State Department of Education, 1973.

Rogers, E. M. *Diffusion of Innovations.* New York. The Free Press, 1962.

APPENDIX A

INFORMATION REQUEST AND CLIENT EVALUATION FORM

PROJECT COMMUNICATE — Request Form

(1–6) 750952

(28) ✓
(32) 4
(35) 2
(36) 5
(78) 40
(33–34)

Name Sally Smart (7–26) Date 4/19/74

School Central Kansas High School District 204 (29–31)

Address Box M (street) Central, Kansas (city) 66612 (zip)

Phone 422-5121

Check all terms that apply: (27)

(X) teacher ( ) board member ( ) patron ( ) paraprofessional

( ) administrator ( ) KSDE staff ( ) student ( ) non-certified

( ) counselor ( ) other

date received 4/24/74
date requested 4/25/74
date filled 5/5/74

Describe the topic about which you are seeking information:

She is the art coordinator for the entire district. She would like information at the levels K through 6 in information pertaining to elementary art. She would like to know of any programs that have been tried. She would like bibliographies of teaching methods or materials. She has had difficulty with the elementary teachers in this system in getting them to try new things in art, that is, something other than 36 George Washington's, all the same, all drawn and colored on the same day.

Descriptors: (38–77)

Art Education

Art Activities

Instructional Materials

Elementary Grades

Reason for request:

She would like this information for elementary planning and hopefully for implementation at the elementary level.

Follow-up comments

5-9-74 (D) "Art Education"
6-2-74 (D) "Art Education"-Elementary (mailed)
6-8-74 (MF) order in
8-29-74 (MF) MF 4 EJ delivered
1-10-74 follow-up

Smart has used the material extensively with elementary teachers.

Many art programs have been changed

5-17-75 Evaluation in

Sources:

C

750952 Title Art Education

Name Sally Smart

School Central, Kansas H.S.

How well did the material fulfill your request for information?

___ excellent
X very good
___ good
___ fair
___ poor

comments-

How will this information be utilized?

X classroom units
X curricular revision
___ administrative decision making
___ professional growth
___ other

comments-

How many other people have used this information?

4

When do you plan to use the information obtained from this search?

X have already used the information
___ in the near future
___ in 3 months
___ months
___ do not plan to use

comments-

New programs were adopted.

5-ORDER
2-COMPLEXITY
0-LAIN
4-SYSTEM
40-TOTAL

Planning, Research and Evaluation
Kansas State Department of Education
120 East Tenth Street
Topeka, Kansas 66612

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Form 05-02-100

APPENDIX B

EVALUATION FORM FOR

CURRICULUM GUIDES

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EVALUATION FORM FOR CURRICULUM GUIDES 001 379

ERIC

NAME Lila Arlene Koehn

SCHOOL McPherson USD# 418

Our records show that you have received curriculum guides from the six volume ERIC curriculum catalog. This form is to evaluate the effectiveness of these guides.

How would you rate the overall value of the six volume ERIC curriculum catalog?

____ excellent
X very good
____ good
____ fair
____ poor

comments-

How have/will these curriculum guides be used?

X in my classroom
X curricular revision
____ administrative decision making
____ other (please comment)

comments-

When do you plan to use these guides?

____ have already used them
____ in the near future
X during the next school year
____ do not plan to use

comments-

Did you have access to a reader at a convenient time? ____Yes ____No
How many other people used these guides? ____

Please give this form to your Local Linker upon completion. Glenn Pyle

Planning, Research and Evaluation
Kansas State Department of Education
120 East Tenth Street
Topeka, Kansas 66612

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Form 06-03-106

APPENDIX C

PROJECT COMMUNICATE

NEWSLETTER EVALUATION

PROJECT COMMUNICATE

NEWSLETTER EVALUTATION

During the current school year, your school periodically received Project Communicate newsletters intended for distribution to staff members. Please assist us to evaluate the effectiveness of the newsletter by checking the statements most applicable.

Did receive the newsletter. X

(or)

Did not receive the newsletter. ___

Did the newsletter periodically remind you about how the Project could be of service to you? X

(or)

Did you consider the newsletter as merely another piece of junk mail? ___

Did you know that you had access to Project Communicate services prior to receiving the newsletter? X

(or)

Was the first indication that you had access to Project service at the time you received a newsletter? ___

Did you follow through on any activities suggested in in the newsletter? For example, did you (please check all that apply)

*Order curriculum guides from the ERIC Curriculum Catalog? ___

*Request a literature search? X

*Send for materials listed as available free or for a small charge? X

*Contact any school about promising programs/ practices in progress? ___

Please refold this questionnaire - Seal and Mail. No postage required.

APPENDIX D

PROJECT COMMUNICATE

NEWSLETTER

Project Communicate

Routing Slip
Please pass this newsletter on to:

_____

_____

_____

_____

_____

vol 1
no 3

Kansas State Department of Education

Nov.
1973

Project welcomes new schools

Project Communicate, a pilot information dissemination service, was initiated two years ago by the Kansas State Department of Education (KSDE) cooperatively with the National Institute of Education (NIE). The major information resource utilized by the Project is ERIC (Educational Resources Information Center). ERIC currently offers on computer tapes, bibliographical access to some 60,000 reports through its RIE (Research in Education) files, and to articles in over 570 education periodicals indexed by CIJE (Current Index to Journals in Education).

During its first 18 months, the Project provided responsive information without charge to 1645 individual requests from staff members of 14 Kansas school districts and the KSDE. Now the KSDE is offering during the current school year, Project Communicate service to additional school systems throughout Kansas. Your district has elected to participate and a district staff member has been designated as a local linker to the Project's central office at KSDE, Topeka.

As a service available to school staff members, Project Communicate offers two primary avenues for receiving information: the ERIC Curriculum Catalog and the original computer search. At least one copy of the catalog is available in each district (in most cases more than one) for use of staff. Documents listed in the catalog may be ordered directly from the Project through your local linker.

Requests for information other than curriculum guides listed in the catalog normally will require a computer search. The local linker in your district is available to assist in preparing requests and in interpreting the information returned to you. Request and order forms are available in your building, from your local linker.

See your local linker for further details!

New districts added to pilot region in October

By mid-October, Project Communicate had arranged with 21 Kansas school systems to receive Project service in the 1973-74 school year. Thirteen of the 21 systems are original pilot districts. The new districts and superintendents are:

*USD 354, Claflin
Richard R. Connell

*USD 355, Ellinwood
Sam C. Stitt

*USD 428, Great Bend
Jack Bell

*USD 431, Hoisington
Walter L. Smith

*USD 413, Chanute
Buford E. Fisher

*USD 256, Moran
William Muckenthaler

*USD 257, Iola
Ennor G. Horine

*USD 258, Humboldt
John Smith

Curriculum Catalog New This Year

Expected to add impetus to Project Communicate's service in 1973-74 is the project-created curriculum catalog which permits clients to order some 1500 ERIC curriculum guidelines from the project without resorting to an original computer search.

The project staff created the catalog on the premise that there should be a more convenient method to supply the much-requested curriculum guides.

The catalog contains 1518 computer printouts classified into 6 volumes according to instructional areas. The printouts are descriptions of the documents. The documents themselves are ordered from ERIC Retrieval at KSDE.

The volumes of the catalog are classified as follows:

I. Vocational Education, Technical Education
II. Language Arts
III. Social Science
IV. Music, Foreign Languages
V. Math, Sciences, Environmental Education
VI. Special Education, Health and Family Living, Physical Education, Driver's Education

Changes in project staff

Ms. Jayanne Angell, consultant at Lawrence for 14 months is now working at Topeka. She will, however, spend a great deal of time in the field assisting project director Richard Herlig in conducting training workshops for pilot and new schools.

In a staff change effective last summer, Mrs. Nancy Flott of Topeka, has replaced Mrs. Bonnie Campbell, as information specialist. Mrs. Flott holds an M.S. in library science from Emporia State College and has spent 13 years as a school librarian.

Highly Recommended

ED 065 735 (see sample computer printout below) could serve as "Super Document" if one is looking for ideas for nine-week courses, particularly designed to be non-sequential and non-graded.

ED 065 735 is only one of thousands of useful ERIC documents which may be ordered on microfiche free from Project Communicate.

ED 065 735 AA 001 030
Authorized Courses of Study for the Quinmester Program. Curriculum Bulletin 1Q.
Dade County Public Schools, Miami, Fla.
Pub Date Apr 72
Note—525p.
EDRS Price MF-$0.65 HC-$19.74
Descriptors—*Catalogs, *Curriculum Guides, *Extended School Year, *High Schools, Year Round Schools
Identifiers—Florida, *Quinmester Program
This master catalog lists and describes the nine-week courses of study basic to the curriculum structure for the quinmester extended year program. Most of the courses listed in this bulletin are designed to be nonsequential and nongraded. Prerequisites are indicated when they are essential for the successful completion of a course. Courses that carry credit in more than one area are listed under each subject area. A numeric code preceding the course titles represents a combination of the State accreditation and the local course identification numbers. The symbol to the left of a course title indicates that the course has been published. This catalog supersedes the edition published in March 1971 (ED 058 670). (Author/MH)

More project communicate publications to come

Look for more publications this year prepared by the project on the status of promising programs and practices in Kansas schools. Subject matter of the first publication will concern independent study and should be in print by mid-fall.

In the meantime, the following publications completed in 1972-73 may be ordered in either microfiche or hard copy from the Project:

*The Extended School Year

*Open Education

*The Mini-Course: A Promising Technique

PROJECT OFFERS FREE PACKAGE OF INFORMATION SERVICE

The free "package" of information services available to school districts participating in Project Communicate's service will include the ERIC Curriculum Catalog and a specified number of original computer searches, documents and pages of hard copy.

Microfiche readers are the only necessities which must be supplied by the districts.

*The ERIC Curriculum Catalog: source developed by the Project for ordering over 1500 curriculum guidelines without a computer search.

*Original computer searches: conducted for requests that cannot be fulfilled directly from the curriculum catalog.

*Documents: the term as used here applies both to ERIC reports on microfiche and copies of articles from journals indexed by CIJE.

*Hard copy: as used here applies to material in print on paper in contrast to material in print on microfiche.

50¢ LIST

For only 50¢ the publication, A Useful List of Classroom Items That Can Be Scrounged or Purchased, is available from Early Childhood Education Study, EDC, 55 Chapel Street, Newton, Massachusetts, 02160.

Educational Resources Information Center

Glossary of ERIC terms

ERIC (Educational Resources Information Center)—a system designed to disseminate information relating to education research and practice and covering early childhood on through university and adult levels.

RIE (Research In Education)—a publication which provides information about reports as they are added to the ERIC system. The same information goes on computer tapes.

CIJE (Current Index to Journals in Education)—a companion publication printed monthly by ERIC which provides information about articles from 570 journals of education. The same information goes on computer tapes.

Microfiche—a piece of four-inch by six-inch film which reproduces up to ninety 8 x 11 typewritten pages and requires a special machine to read.

ERIC Microfiche Collection—aggregate of all the reports collected by ERIC since 1966.

Hard Copy—copies of ERIC reports on paper.

RIE/CIJE Printouts—printed sheet produced by the computer which contains information (bibliographical detail, abstract) about reports and/or journal articles.

Report Number—the number prefaced by ED (Educational Document) or EJ (Educational Journal) appears at the top left hand side of the computer printout.

FREE FILMS

Happiness is free materials! Contact Public Office Manager, Southwestern Bell Telephone, 823 Quincy Street, Topeka, Kansas, or Public Relations Department, United Telephone Company of Kansas, Inc., 138 West 6th Street, Junction City, Kansas, for publications listing films for loan free to schools.

CATALOGS AVAILABLE

Material from the Kansas Heritage Center is loaned to schools at a very nominal cost. Write for a free catalog providing titles and descriptions of books (7,000), films, records, pictures and magazines to P. O. Box 1275, Dodge City, Kansas, 67801.

Wanted: News about Promising Educational Programs & Practices

Project Communicate hopes to become a clearinghouse for disseminating information about promising programs and practices. The rationale is that we think each school in Kansas should have the opportunity to find out what sister schools in the state are doing. In addition, we hope to include submission of reports for inclusion in the ERIC files. Naturally, we need your help. To simplify the process, we compiled a list below so that you may simply check those programs and/or practices going on in your school which you are willing to share with others. If we have missed any, list your own under "others".

The list is as follows:

Adult Education
Advanced Placement
Behavorial Objectives
Career Education
Computer-Assisted Instruction
Cross-age Teaching
Curriculum
Cultural Awareness
Curriculum Guides
Educational Cooperatives
Educational Games (use and/or development)
Elementary Counseling
Environmental Education
Exemplary Summer School Programs
Independent Study
Individualized Instruction
Instructional TV
In-service Training
Interest Centers
Media Centers
Middle School
Mini-Courses
Modular Scheduling
Multi-Media
Open Classrooms
Open Plan Buildings
Outdoor Education
Parent Involvement
Paraprofessionals
Pre-School
Programmed Instruction
Remedial Classes
Simulations
Team Teaching
Ungraded Classrooms
Unique AV Techniques
(Examples: filmmaking, multi-media presentations, videotaping)
Other: _____

_____

_____

Check, clip and return today to Project Communicate, 120 East Tenth, Topeka, Kansas 66612.

Name _____

School _____

Address _____

Phone No. _____

Promising programs initiated last year

As possible incentive to clients in the field to report news of promising programs and practices to Project Communicate, the following are examples of some of the programs which were initiated during the 1972-73 school year:

Ungraded Primary Program (K-3)
USD 342, McLouth
McLouth Elementary School

Participating teachers developed this program which was applicable to the science and social studies areas in its first year. Classes in these areas were non-graded. Children had choice of units of study.

Mini-Course Curriculum (9-12)
USD 321, Kaw Valley
St. Marys/Rossville High School

Programs for school year were segmented into four blocks of nine weeks and were non-graded. This type of organization permitted each school to offer approximately 140 courses.

Filmmaking
USD 348, Baldwin
Baldwin High School

A high school English class was divided into small groups. The techniques of filmmaking were learned as each group completed a film of a short story.

PREPs are Pertinent

Among the information resources available from the Kansas State Department of Education are some 30 USOE-prepared reports focusing on specific educational topics. The reports are called PREPs (Putting Research into Educational Practice).

A list of the PREPs available was mailed recently by the KSDE to all Kansas educators. Consult the list, make selection(s) and address requests to Wesley Pelsue, Educational Specialist, KSDE, 120 East 10th, Topeka, Kansas 66612.

Authorized Agent and Grantee – Dr. C. Taylor Whittier, Commissioner, Kansas State Department of Education

Project Director – Dr. Richard K. Herlig

Information Specialist – Mrs. Nancy Flott

Education Program Specialist – Dr. Jayanne Angell

Information Writer – Mrs. Maxine Fitzgerald

The work presented or reported herein was performed pursuant to a grant from the National Institute of Education, U. S. Office of Education, Department of Health, Education and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the National Institute of Education and no official endorsement by the National Institute of Education should be inferred.

Project Communicate OEG-0-71-4646

31 DISTRICTS SLATED FOR PROJECT SERVICES

Project Communicate is presently contacting additional school systems as potential clients, anticipating that approximately ten more systems will be added to the 21 districts currently receiving project service.

Look for the listing of all the districts served by the Project as well as names of the districts' local linkers in next month's newsletter.

School Superintendent Praises Project Communicate Program

Shortly after the 1972-73 school year began, R. L. Powers, Superintendent of USD 464 Tonganoxie, reported on Project Communicate via his column in the Tonganoxie Mirror.

"Several of our teachers are involved in a federal program entitled *Project Communicate*. This is an excellent program at no cost to the district, that enables our teachers to request and get information about almost any and everything concerning curriculum, research studies, innovative teaching techniques and a multitude of other areas to help them do a better job of teaching our students."

Project Communicate
Kansas State Department of Education
120 East 10th Street
Topeka, Kansas 66612

Bulk Rate
U.S. Postage
PAID
Topeka, Ks. 66612
PERMIT NO.
452

APPENDIX E

CONTRACT FOR

INFORMATION RETRIEVAL SERVICES

Date:_____, 19____ KSDE Contract No. _____
State Board - Educational Institution

AGREEMENT FOR SERVICES

1. Whereas, the Kansas State Board of Education through Project Communicate of the Kansas State Department of Education desires to participate with:

for computerized information search services and

2. Whereas, such services shall include, but not be limited to, computer generated bibliographies and manual searches of education indicies, microfiche reproduction and hardcopy of documents from the Educational Resources Information Center (ERIC) collection.

Now, therefore, it is agreed by the parties hereto:

3. That the above "whereas" clauses are made a part of this agreement.

4. That the following definitions of terms shall apply for this contract:

a. "Literature Search" shall be a computer search of RIE (Research in Education) and CIJE (Current Index to Journals in Education) files and appropriate manual searching of Education Index and other documents from the Kansas State Department of Education professional library.

b. "Documents" shall mean microfiche duplicates of documents from the ERIC collection, or paper copies of articles from published and nonpublished journals.

c. "Hardcopy" shall mean one page of a document reproduced back to its original size from one frame of a microfiche.

d. "Package" shall mean a group of literature searches, documents, or hardcopy.

5. That the State Board of Education, as consideration, has established a fee or cost schedule for providing packages of information services to educational institutions in the following amounts: (1) A $500 package includes literature searches at $20 each, documents at $0.65 each, and hardcopy at $0.15 each; (2) A $1,000 package includes literature searches at $17.50 each, documents at $0.65 each, and hardcopy at $0.15 each; (3) A $1,500 package includes literature searches at $15 each, documents at $0.65 each, and hardcopy at $0.15 each: provided, that the contracting institution may order <u>any</u> combination of literature searches, documents and hardcopy to the limit of its total package cost.

6. That the above named (see paragraph 1.) agency, institution, board of education, governing authority of public or nonpublic school or consortium,

or individual, agrees to purchase a _____ $500 (Five hundred dollar package)

_____ $1,000 (One thousand dollar package)

_____ $1,500 (Fifteen hundred dollar package)
(Check package desired)

of informational services.

7. That it is further agreed by the parties hereto that the terms of this contract shall not exceed a period of time from July 1, 1974, at 8:00 a.m., to June 30, 1975, at 5:00 p.m., unless otherwise changed by mutual agreement; and that the consideration as checked in paragraph six shall be due at the office of the State Board of Education on or before said June 30, 1975.

In Witness whereof, the parties hereto have set their hands and affixed their seals the day and year noted.

Approved by:

_____
Departmental Attorney

Date_____

(SEAL)

Kansas State Board of Education
By:

_____
C. Taylor Whittier, Commissioner

Date_____

_____
Lawrence Casto, Asst. Commissioner
Division of Development

Date_____

_____
R. K. Herlig, Director
Project Communicate

Date_____

Name of Education Institution or Purchasing Agency

By: _____

Title: _____

Date: _____

(SEAL)

Attested or witnessed by: _____

Title: _____

Date: _____

RKH/G/T /ac